

# GOVERNMENT OF ORISSA



## ROURKELA AN ECONOMIC SURVEY

FINANCE DEPARTMENT  
ECONOMIC SURVEY BRANCH  
1958

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## **ROURKELA** **AN ECONOMIC SURVEY**

**BY**  
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**FINANCE DEPARTMENT**  
**Economic Survey Branch**  
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## Letter of Transmittal

To

The Secretary to the Government of Orissa,  
Finance Department,  
Bhubaneswar.

Dated, Cuttack the 19th of May, 1958.

Sir,

I submit herewith a report of Economic survey of the Rourkela region.

In their resolution dated the 2nd January, 1954, the Finance Department entrusted me with the task of carrying out a comprehensive economic survey of Orissa. While the field investigation was in progress, it struck me that it would be very useful to make a specific economic survey of the Rourkela region and I undertook the work. This survey was incidental to the comprehensive economic survey of the State. On account of the establishment of a steel plant and allied and ancillary industries around, the economy of the Rourkela region will undergo a transformation. Preliminaries in this connection were just then being arranged and this was the appropriate time for undertaking an investigation with a view to obtaining bench-mark statistical data. These data will provide the basis for measuring the dimensions of economic change in this region from time to

time. The analysis presented in this report may assist in the formulation of socio-economic policies.

The survey was conducted with the help of the staff working for the comprehensive economic survey of Orissa. Three additional investigators were appointed for a period of about three months to expedite the investigation in Rourkela. Shri B.K. Kar, O. A. S., Administrative Officer in the economic survey, supervised the field operations. Shri K. M. Patnaik, O. E. S. and Shri J. K. Misra, O. E. S., who were appointed Administrative Officers in succession, assisted me in the preparation of the report.

Yours faithfully,

S. Misra

19. 5. 58.

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## CHAPTER—I

### INTRODUCTION

#### *Objective of the Survey*

The decision to locate a steel plant at Rourkela in the district of Sundergarh opened a new and bold chapter in the economic development of India. The establishment of three steel plants at Rourkela, Bhilai and Durgapur forms a major item in the industry-oriented Second Five Year Plan. Steel is the basis of modern industrial development and in fact the volume of production of steel in a country is an index of the level of industrial progress. The Second Five Year Plan emphasises the development of basic industries such as iron and steel, coal, fertilizers, heavy engineering and heavy electrical equipment. These industries and particularly, iron and steel, constitute the corner stone of industrial expansion. The Second Plan thus lays the foundation on which will be erected an industrial structure on modern and scientific lines.

2. The steel plant at Rourkela is one of the pillars on which the economic strength of India will be built. This plant has a particular significance for the economy of Orissa. Orissa has been economically one of the most undeveloped regions in the Indian Union. Its economy has been overwhelmingly dependent on agriculture. This unbalanced structure of the economy has been subjected to periodic strains and disasters in addition to providing a low living standard to the people in normal times. Orissa has enormous mineral resources which promise days of prosperity when these resources will be utilised. The steel plant at Rourkela is the first major attempt in this direction. In the agricultural economy, the coastal districts enjoyed comparatively greater economic advantage. With the utilisation of the mineral resources and consequent establishment of other industries around, many areas in the inland districts of the State will come to economic prominence.

3. The area in and around Rourkela and a large part of the district of Sundergarh will be intimately affected by the establishment of the steel plant and various other industries that would come up eventually. This industrialisation will fundamentally change the economic structure of the region. In some areas, the existing economy will be wiped out and industrial plants and townships will come into existence. In the region around this, the industrial impact will bring about a major change in the agrarian system and agricultural production. New employment opportunities will become available and income and standard of living will be altered in various ways and degrees. It would be useful to watch these changes and assess their character and significance from time to time. A part of the region in and around Rourkela will become, so to say, a lost world sometime after. The present survey is designed to provide bench-mark data of the economic condition on the eve of the establishment of the steel plant. These data will not only provide the basis for measuring economic changes, but also assist the planners in formulating socio-economic policies.

### *Coverage*

4. In making a survey to obtain bench-mark data, it is necessary to determine what area should come under the scope of investigation. It is difficult to say how far geographically the intimate reaction of the steel plant in Rourkela would extend. One has, therefore, to make a broad guess and confine the survey to a region roughly calculated to be vitally affected by the impact of these industries. It must not be presumed that the area surveyed should be considered as the geographical limits within which economic change would take place. The analysis arrived at on the basis of the survey gives a picture not only of the area actually surveyed but also of the surrounding region.

5. The Revenue Department of the Government of Orissa published a Notification in the Orissa Gazette on the 22nd of February, 1954 specifying an area of about 78 sq. miles required

to be acquired for the development of industries, namely, establishment of a steel plant and allied and ancillary industries in the Rourkela region. This area comprised 92 villages in and around Rourkela. A copy of this Notification is re-produced in Appendix A. It was thought desirable to carry out the survey in respect of this area of 78 sq. miles for the purpose of securing bench-mark data.

6. The survey was conducted in the area specified in the Notification. It was found in course of investigation that these 92 revenue villages, comprised of 98 residential villages spread under the jurisdictions of three Police Stations in the district of Sundergarh. Of these, 75 villages are under Raguhnathpalli, three under Kalunga and 20 under the Bisra Police Stations. A list of these villages with the number of families surveyed in each village is given in Appendix B. The total coverage of the survey in the Rourkela region is as follows:—

Area	About 78 sq. miles.
Villages surveyed	98
Number of families surveyed	5363.

7. It should be pointed out that although the area surveyed was 78 sq. miles with 98 villages, the economic picture of the region, analysed on the basis of the data collected, is a picture of the surrounding area as well. There is no major town or industrial centre within a reasonable distance which would suggest any different economic situation in the areas around these 78 sq. miles. What is true of these 98 villages is broadly true of the regions extending over a much larger area. There is no significant factor over a fairly wide area around the region surveyed to warrant any departure from the general economic condition in the 98 villages. The analysis presented in this report is thus applicable to a wider region and will, therefore, serve a useful purpose.

#### *Design and method*

8. A comprehensive socio-economic survey of Orissa has been entrusted to me. This survey was carried out through

various schedules designed to collect information on different aspects of the socio-economic life of the people. This included both the rural and the urban population. The rural survey was conducted in three rounds. The first round of the investigation was carried out on the basis of a simple questionnaire relating to population, occupations, land holdings, earnings and employment. This schedule prepared for the survey of Orissa was modified in certain respects and then used for the investigation of the Rourkela and the surrounding regions. A copy of this questionnaire is given in Appendix C.

9. In this survey, the family or household has been taken as the unit of investigation. The investigators approached the head of each family in the region and collected information according to the questionnaire. This was not a sample survey. All the 5363 households in the region were individually surveyed by the investigators under the supervision of Supervisors, the field Controller and the Administrative Officer. The investigators had to contact the heads of families according to their convenience of time. There was scarcely any resistance on the part of the respondents although it was necessary to go to some of them a number of times, so that they would be free from their occupations to answer to the questionnaire. According to instructions, the investigators established contact with the villagers, created confidence and then proceeded to collect the information. The extent of accuracy in the information gathered depended on the ability of the respondents to remember each fact accurately. By questions and cross-questions, the replies were verified and so far as the general picture of the economic situation is concerned, if there were any slight discrepancies at all, these are scarcely of any material significance in making the analysis.

10. The survey was conducted at the time when the preliminaries in connection with steel plant were just being started. The period covered by the survey extended from April, 1955 to July, 1955. The picture presented in this report is thus an analysis of

the economic situation just on the eve of the starting of the steel plant.

*Plan of the report*

11. The information collected in the survey has been presented and analysed in the four following chapters. The second chapter presents a study of the population in the Rourkela region, showing the density in the area, growth of population and the caste composition of the inhabitants. An analysis of population according to age, sex and the composition of the families has also been given. Chapter III contains an analysis of the occupational structure showing the main and subsidiary occupations of the households and their relative importance. Chapter IV presents a picture of the size of the agricultural holdings as well as the size of the units of cultivation in this region. The distribution of the ownership of land and the extent to which land is taken on lease for cultivation bring out the agrarian structure of the community. The last Chapter is devoted to a study of income and employment including an assessment of the human resources and the surplus man-power available in the region.

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## CHAPTER—II

### POPULATION

#### *Introductory*

An analysis of population is the base on which an economic survey is to be erected. The structure of an economy is shaped by population and it is to minister to the welfare of that population that the economy is to be designed. Any plan for economic development is to be devised with reference to the character and quantum of the factors of production. The condition of the people residing in the particular region has to be taken into account in shaping the policy of economic development. The character and composition of the population will not only determine the man-power available in the region, but also will indicate the way in which employment opportunities are to be devised. From the short-period of point of view, the structure of the population on the eve of the coming of the steel plant will indicate the magnitude of the problem in devising civic and economic arrangements for the displaced population from the villages to be acquired. From the long period of point of view, the social and economic organization of the region must necessarily be adjusted with the existing social and economic set-up of the population. A study of the structure of the population in the Rourkela region is therefore of primary importance.

#### *Density of Population*

2. Orissa is not as thickly populated as some of the other States in India. It must however be pointed out that the density of population in Orissa is greater than in the region comprising the old States of Hyderabad, Assam and Madhya Pradesh. While for the whole of India the average density is 312 persons per square mile, the density in Orissa according to the census of 1951 was 244 persons to a square mile. This however does not bring out the wide disparities in density in different regions of Orissa,

The following statement shows the density in different regions and in the different districts of the State.

*Statement I*

Density of Population (1951)

	Persons per square mile.
India	312
Orissa	244
Coastal Division	473
Inland division	175
Cuttack	601
Balasore	441
Puri	389
Ganjam	344
Balangir	269
Mayurbhanj	256
Dhenkanal	199
Sambalpur	192
Keonjhar	183
Kalahandi .	170
Sundergarh	146
Koraput	129
Phulbani	107

3. It is clear from the above statement that the density in the coastal regions of the State is very much greater than in the inland division. The coastal districts have extensive agricultural facilities with good soil and net-work of rivers. These districts have comparatively much easier means of communication. Naturally therefore in a predominantly agricultural economy, there has been concentration of population in these areas. The most densely populated areas are along the sea coast and on the deltaic region of the river Mahanadi. The district of Cuttack is in fact the most densely populated area in the State.

4. The inland region has been inaccessible in most parts. There are rocks, hills and jungles, and agricultural facilities in

many places have been meagre. Accordingly, in an agricultural economy, these areas were left sparsely populated. Gradually, however, different parts of the inland regions are being opened up and becoming accessible. Therefore, population in these areas has been fast increasing.

5. The district of Sundergarh is one of the very sparsely populated area in the State. Large areas are still empty and the density of population in this district is very much lower than the average even in the inland region. Only the districts of Koraput and Phulbani have a lower density. With 146 persons per square mile, Sundergarh has plenty of open room for economic expansion and growth of population.

### *Growth of Population*

6. One of the major problems in India is the rapid growth of numbers. During the half century, from 1901 to 1951, India's population has increased by 51.5 per cent. It is a Herculean task to expand the economy even to maintain the existing standard of living, what to speak of bringing about progressive improvements. The increase in the population in Orissa has also been considerable. While the population of India has increased by 51.5 per cent, Orissa's population during this period has gone up by 42.2 per cent. The economy of Orissa has remained stagnant over a very long period and even though the increase in population in Orissa has been somewhat lower than for the whole of India, the pressure of population in Orissa has been a matter of concern because of the primitive character of the large sector of the economy.

7. Although for the State of Orissa, the average growth of population has been by 42 per cent over a period of 50 years, the growth has been exceedingly uneven over the different parts of the State. This uneven growth is a remarkable feature showing how the existing structure is being rapidly changed. The following statement brings out the growth of population in different regions of the State during the period, 1901 to 1951.



*Statement II*

Increase of population between 1901—1951.

	Per cent.
Orissa	42.2
Coastal division	17.6
Inland division	72.3
Cuttack	14.6
Balasore	2.9
Puri	18.6
Ganjam	42.3
Balangir	105.1
Mayurbhanj	68.6
Dhenkanal	46.7
Sambalpur	64.9
Keonjhar	105.9
Kalahandi	79.4
Sundergarh	99.2
Koraput	83.1
Phulbani	36.8

The statement shows how glaring has been the difference in the growth of population in the coastal division and in the inland division. While the increase in the coastal areas has been 17.6 per cent, the growth in the inland division has been as high as 72.3 per cent. With the opening of the inland areas and different parts becoming accessible, virgin land-resources gradually came to be utilised. Lands were reclaimed in various areas; forest resources were increasingly utilised and mines and quarries were worked in different places. All these led to rapid increase in population. On the other hand, in the coastal regions, with the existing technique of the agricultural practices, there was not much scope for additional population in any considerable degree. Accordingly, the growth of numbers in the coastal regions has been very small compared to the growth in the inland areas.

8. It will also be observed from the statement above that in some districts the growth has been exceedingly great and

Sundergarh is one of such districts. The increase in the districts of Bolangir, Keonjhar, Sundergarh, Koraput and Kalahandi has been spectacular. During this half century the population of Sundergarh has been almost doubled, even though this district continues to be one of the very sparsely areas of the State.

9. There is ample room for expansion in Sundergarh. The rapid rise in numbers has not been due only to the natural rate of increase. On account of different parts of the State becoming accessible from time to time and mineral resources being worked out, there has been a good deal of in-migration of population into this district, particularly from Chotanagpur.

10. Construction of railway line through this district has been an important factor in the opening up of certain areas. During the period 1911 to 1921, dolomite and lime-stone quarries were opened in Rajgangpur and Raghunathpalli. Reclamation of waste lands was taken up and cultivation was extended. In 1922, railway line was constructed up to Biramitrapur and lime-stone and manganese quarries were developed further. All these factors encouraged in-migration. During the decade 1941-51, there has been a certain amount of industrial progress. A cement factory was started at Rajgangpur. There was considerable expansion of work in the lime-stone quarries. On account of these factors there has been a steady growth of population in the district of Sundergarh. The following statement will show how population has extended in this district from 1901-51.

### *Statement—III*

#### *Increase of population in Sundergarh*

Year	Population	Percentage increase.
1901	277,173	24.0
1911	362,138	30.7
1921	377,449	4.2
1931	436,860	15.7
1941	490,708	12.3
1951	552,203	12.5

11. The rate of increase has been maintained at a consistent rate excepting for the period 1911-21. During this period there was a severe influenza epidemic throughout the district and in 1919 cholera and small-pox further added to the loss of life in this region. On account of these deadly epidemics, the rate of increase during this decade was low. Otherwise during the entire period of 50 years, there has been a rapid growth of population in this area. With the development of means of communication, working of mineral resources and starting of industrial concerns, there has been persistent and rapid increase in numbers. With this increase, agricultural expansion has all along been taking place.

12. Our survey was conducted in 98 villages in and around Rourkela. Our survey showed that these villages contained 5,363 families with a population of 33,041. It is in respect of this population, that measures of settlement and rehabilitation are to be devised when they were to be displaced on account of acquisition of the villages. The structure, character and composition of this population will furnish the basic socio-economic set-up on which the steel plant is being erected.

### *Castes and Classes*

13. Castes and classes have all along exerted an important bearing not only on the cultural life in the region, but also in the social and economic life of the people. Various occupations, propensity to take up different kinds of work and the extent of efficiency in different directions have, to a great extent, been conditioned by castes and classes. Apart from great diversities in the community-living among different castes and classes, the economic significance of these divisions has been very great. From the point of view of the ideals of social construction and equity in the sharing of economic products, these divisions should disappear; but the significance of their present position has to be adequately visualised. It may not be worthwhile to enter into the very many different castes and sub-castes to assess their economic significance; but it is essential in analysing the structure

of population that the relative position of the scheduled castes and scheduled tribes should be distinctly brought out from social, economic and occupational point of view. This distinction is exceedingly important. In the census report of 1951, a large number of classes have been grouped under "other backward classes." Educationally these classes may indeed be backward; but from the economic point of view, there is not much significance in treating these classes separately.

14. In the State of Orissa, about 2½ths of the population belong to scheduled tribes and scheduled castes. Although the scheduled caste population is more or less evenly distributed among the different districts in the State, there is great disparity with regard to the percentage of tribal population in the different regions. The following statement shows the distribution of the population belonging to the scheduled tribes and scheduled castes in different parts of the State.

*Statement—IV*

Percentage of population belonging to  
scheduled tribes and scheduled caste  
(1951 census)

	Scheduled tribe	Scheduled caste
Orissa	20.2	18.0
Inland division	33.4	17.5
Coastal division	4.6	18.6
Cuttack	3.2	19.5
Balasore	5.7	19.6
Puri	4.0	16.2
Sambalpur	27.0	17.1
Ganjam	6.9	18.6
Koraput	41.2	16.5
Dhenkanal	12.4	17.3
Keonjhar	38.8	15.3
Phulbani	42.7	18.9

	Scheduled tribe	Scheduled Caste.
Bolangir	20·3	19·9
Sundergarh	56·6	13·2
Kalahandi	28·4	20·6
Mayurbhanj	49·1	16·9

15. The statement shows that the percentage of tribal population in the coastal districts is very small. About 1/3rd of the total population in the inland region is tribal in character. Even in the inland region, the distribution of tribal population is very uneven. The districts of Sundergarh, Mayurbhanj, Phulbani and Koraput contain a very large percentage of population belonging to the different scheduled tribes. But the most significant fact to be observed is that Sundergarh is the only district in the State where the tribal population forms a majority of the total population, the percentage being as high as 56·6. In the general socio-economic survey of Orissa undertaken by us at the time when the Rourkela survey was conducted, it was found that the percentage of tribal population to the total rural population in the district of Sundergarh constitutes 54·9. This is not significantly different from the figure in the census of 1951. The economic development along with the steel plant has therefore to take into account this composition of the population in the district of Sundergarh.

16. Although the population belonging to the scheduled castes is more or less evenly distributed in the different areas of the State, Sundergarh is the district where the proportion of population belonging to these castes is the smallest, being 13·2 per cent. Our survey however shows that the percentage of population belonging to the scheduled castes in this district was much smaller i.e., 4·2 per cent. This is also a significant feature of the population in this district. Though majority of the population in this district belongs to the tribes, the various scheduled castes are not as populous here as in other parts of the State. In this background the composition of population in the 98 villages in and around Rourkela has to be studied to assess the economic

potentiality of man-power and the social planning to be undertaken.

17. As has been mentioned above the "other backward classes" are not taken into account in the analysis of composition. All the Hindus who do not belong either to the scheduled tribes or to the scheduled class have been grouped together under the heading "non-scheduled Hindus." Since non-Hindus form a very small proportion of the total population, it is convenient to group all of them under one category, "other religions." Statement—V shows the caste composition of the population in the Rourkela region.

*Statement—V*

Caste Composition of the Population

Sl. No.	Caste	Percentage to total population.		
		<i>Rourkela</i>	<i>Sundergarh</i>	<i>Orissa.</i>
1. Non-scheduled				
	Hindus ..	26.6	31.4	60.9
2. Scheduled Castes		9.6	4.2	16.9
3. Scheduled Tribes		45.3	54.9	20.1
4. Other Religions		18.5	9.3	2.0
5. Not given		—	0.2	0.1

18. It has already been pointed out that 1/5th of the population in Orissa belongs to the scheduled tribes and Sundergarh has 54.9 per cent of its population belonging to the various tribes. It will be seen from the Statement that the tribal population in Rourkela is about 10 per cent less than in the district of Sundergarh as a whole. Although the scheduled tribes are as predominant in this region as in the whole district, the fact that its percentage is considerably lower in the Rourkela region is to be recognised as significant. It will also be seen from the Statement that the percentage of non-scheduled Hindus in this region is also lower. They form only about a quarter of the total population. The remarkable difference between Rourkela and

Sundergarh as a whole in respect of the composition of the population lies in the group under "other religions". While for the district, the percentage of this population is 9.3, for the Rourkela region, it is as high as 18.5. In the 98 villages surveyed, the Christian population forms 83.7 per cent of the families included in "other religions" and most of them came from among the scheduled tribes. When this is taken into account, the percentage of tribal population in the Rourkela region is not different from the percentage of such population in the district as a whole. The significant fact therefore remains that the non-scheduled Hindus form a somewhat lower proportion of the population in the Rourkela area. All these clearly show how predominantly tribal is the population in the Rourkela region. The Oram tribe with a percentage of about 58, constitutes the single majority among all the tribal families. This tribe is mostly found in Gangpur, Bonai and Sambalpur. The large tribal population, the small proportion of non-scheduled Hindus and the extent of Christian population are the significant features in the Rourkela area.

### *Age-structure*

19. An analysis of the age-structure of the population is necessary for estimating the active labour force and for studying the extent of dependency. It is also possible to forecaste population changes from the age composition. Statement VI below gives the age structure of the population in the Rourkela region as compared with such structure in the district of Sundergarh, for the Orissa State and for the Indian Union.

### *Statement—VI*

#### Percentage of Population in different age groups

Age Group.	ROURKELA. (1951)	SUNDERGARH. (1951)	ORISSA. (1951)	INDIA. (1951)
Below 15	41.5	38.7	37.0	38.3
15-24	16.4	15.3	16.5	17.4
25-34	16.5	16.4	15.8	15.6
35-44	11.7	12.9	12.8	11.9
45-54	7.8	8.0	9.0	8.5
55 and above.	5.9	8.9	8.9	8.3
Not Given,	0.2	(0.02)	—	—

20. It is a well-known fact that the average length of life in India is much smaller than what it is in some of the economically advanced countries of the world. This is largely due to the fact that in India the rate of mortality is heavy in the tender age-groups. For instance, while the percentage of population below the age of fifteen constitutes 22 per cent in England and 27·6 per cent in the United States of America, it is as high as 38·3 per cent in India. It will not serve much useful purpose here to compare the age-structure of the Rourkela population with that of the economically advanced countries. The Statement, therefore gives a comparative picture of Rourkela with the overall picture in the district of Sundergarh and the situation as it obtains for the whole of Orissa and for the Indian Union. It will be clearly seen from this statement that the proportion of the population below the age of fifteen is more or less the same for Sundergarh, Orissa and India, there being very slight differences. But in contrast with this situation, the age group below fifteen in the Rourkela region constitutes a much larger proportion. It is true that boys and girls below fifteen very often assist their parents in agricultural operations, but their number need not be considered as of any major significance. For industrial employment, they should not be taken into account at all. Thus persons belonging to the age-group below fifteen may, in general, be considered as not being engaged in productive activities and 41·5 per cent of the population in Rourkela comes under this category. It can therefore be readily seen that this region carries a heavy dependent population, which is a distinct weakness from the supply of active labour-force from the given population.

21. Broadly speaking, persons belonging to the age-group of 15-54 constitute the economically active population. The larger the percentage of population under this group, the greater the supply of man-power, from the quantitative point of view. A glance through the statement would show that the proportion of this group to the total population in Rourkela is almost the same as for the district of Sundergarh, being 52·4 and 52·6 per cent respectively. The average for Orissa is 54·1, which is to a certain



extent higher than in Sundergarh. Thus the percentage of bread-winners to the total population in Rourkela is lower than in many other parts of Orissa.

22. From the preceding paragraph, it would naturally follow that the age-group constituting 55 and above must necessarily be low in Rourkela, in as much as the active age-group is more or less the same as elsewhere in India and the age-group below 15 contains a much larger proportion. It may perhaps be contended that the low proportion in the age-group of 55 and above would imply a lower percentage of dependents. It should however be pointed out that in agricultural operations, 55 is not a retiring age and in various industrial employments labour does not become incapacitated just after 55. The skill and experience gained through a long period of work will not be made available if the percentage of population under the age-group 55 and above is exceedingly small, though persons belonging to a much higher age may be considered as absolutely dependent. The percentage of persons in this age-group of 55 and above in the Rourkela region is only 5.9 compared to 8.9 in Sundergarh and in Orissa. In some of the advanced countries in the West, old persons form a substantial proportion of the population. Economic privations and lack of medical facilities seem to thin out people in advanced ages in backward regions like Rourkela. The proportion of people who live beyond the middle age is generally high in those parts of the world where the juvenile proportion is low and the converse is also true. (1)

23. The lower the proportion of dependents, the higher the standard of living, other things remaining the same. Leaving aside the qualitative aspects from consideration, the high proportion of population belonging to the age-group of below 15 and the lower percentage of economically active population in the age-structure in Rourkela, indicate a lower standard of living than what obtains in various other parts of Orissa.

24. If we analyse the age-composition at Rourkela in greater details, we will notice further interesting features. The following statement shows the percentage of persons in different age groups in the Rourkela region.

*Statement—VII*

Percentage of males and females in different  
age-groups-at Rourkela

Sl. No.	Age Group	Population		
		Male	Female	Total
1.	Below 13	20.3	19.4	39.7
2.	13-18	3.4	4.6	8.0
3.	19-24	4.9	5.2	10.1
4.	25-30	8.2	6.1	14.3
5.	31-36	3.7	3.6	7.3
6.	37-42	3.4	2.9	6.3
7.	43-48	2.3	2.2	4.5
8.	49-54	1.8	1.9	3.7
9.	55-60	1.7	2.0	3.7
10.	Above 60	0.9	1.3	2.2
11.	Not given	—	0.2	0.2
Total		50.6	49.4	100.0

25. In this statement, the population within the age-period, 13-60 has been divided into successive age-groups of six years. Therefore the shape of the age pyramid becomes distinct on account of this uniform spacing. It will be seen from the table that only 8 per cent of the population belongs to the age-group of 13-18, 10.1 per cent, to the age-group of 19-24 and 14.3 per cent, to the group of 25-30. It is clear from this statement that the number in the most effective age-groups of 19-24 and 25-30 will not be replaced after six years since the preceding age-groups contain lower numbers. This will mean a decline in the affective population. This is indeed a disquieting feature for any region. Again in the age-group of 31—36, there is a sudden fall to 7.3 per cent from the previous group constituting 14.3 per cent. Such

a fall in the age-group of 31-36 is equally distressing. All these indicate that there is a tendency for a rapid increase in the infant population and a heavy death rate among the youth which is an unfortunate situation. A saving feature seems to be that on account of economic expansion in and around Rourkela in recent years, there has been a certain in-migration of population from outside, particularly from Chotanagpur and in all probabilities, the migrant population belongs to the age-group of 25-36. Even so, inspite of the little in-migration that has taken place, the bulging out of the age-pyramid in the age-groups of 19-24 and 25-30 and sudden contraction thereafter are distressing features. In estimating the available man-power this is an important problem which ought to be taken into account. This also emphasizes the need for social improvements and provision of health arrangements in the region.

### *Sex-composition*

26. A study of the sex composition of population in any region helps in estimating the human resources in its qualitative aspects. The trends in the growth of population can also be indicated from such a study. The sex-ratio, particularly in different age-groups, brings out the nature of various social problems. The sex ratio i.e. the number of females per 1000 males is different in different countries depending upon various factors. It is generally recognised that race, environments and dietary conditions affect the sex ratio. Social customs obtaining in the particular communities also have their influence on this composition. The nature of the economic conditions leading to struggle for existence has its effect on the sex composition as well. Therefore for understanding the social and economic condition of the people as well as analysing the trends in growth, an analysis of sex-ratio is extremely helpful.

27. The following statement shows the number of females per 1000 males in the population of Rourkela, Sundergarh, Orissa and India.

*Statement—VIII*

Number of females per 1000 males

Rourkela	975
Sundergarh (1951)	1012
Orissa (1951)	1022
India (1951)	947

In India, as successive censuses have shown, there is a deficit of females. According to the census of 1951, there were 947 females per every one thousand males in India. According to this census, there were only five areas, viz., Orissa, Madras, Travancore-Cochin, Manipur and Cutch where there was slight excess of female population. In view of the fact that most of the prosperous regions of India have a paucity of female population, the theory sometime propounded that masculinity is an index of race decadence appears to be unfounded. While Orissa, one of the scarce region in India, has an excess of female population with 1022 females for thousand males and the district of Sundergarh bears approximately the same model, with 1012 females, the Rourkela region has a paucity of female population. There are 795 females for every thousand males in this region, showing an excess of masculine population. In industrial areas there is generally an excess of male population and the existing excess of male population in Rourkela will add further to paucity of women when the area is industrialised.

28. The following statement shows the sex-ratio in Rourkela in different age-groups as compared with the position in Sundergarh and for the whole of Orissa.

*Statement—IX*

Sex-ratio in different age-groups

Age-group	Females per 1000 males		
	Rourkela	Sundergarh (1951 Census)	Orissa (1951 Census)
Below 15	956	997	987
15-24	1212	780	1016

Age-group	Females per 1000 males		
	Rourkela	Sundergarh (1951 Census)	Orissa (1951 Census)
25-34	781	940	1070
35-44	915	833	971
45-54	983	1053	972
55-64	1108	1597	1108
65-74	1465	2396	1072
75 and above	1409	1171	1053

29. The statement shows that in the age-group, below 15, there is a deficiency of female population in Rourkela as well as in Sundergarh and in Orissa. But the deficiency is larger in the Rourkela region. It is a well-known fact the biologically the male child is weaker and in infancy, a larger percentage of male children fails to survive. The female population in the age-group of 15-24 is exceedingly large in Rourkela. It is as high as 1212 per 1000 males. For the whole of Orissa, there is only a small excess of females in this age-group, there being 1016 females per 1000 in this group of the population. In the district of Sundergarh, this age-group shows a great deficiency in female population. The Rourkela region, therefore, shows an astounding peculiarity in this respect. Generally speaking, the reproductive period among women is between the ages 15 and 45. The age-group of 15-24 is obviously the period of great fertility. The fact that there is such an excess of women in this age-group would indicate a large birth-rate in this area and therefore, if the death-rate can be controlled substantially, the increase in the population would necessarily be very rapid. In the next age-group of 25-34, the proportion of women suddenly falls steeply to 781 per 1000. This is a very unusual feature compared to the position in the district of Sundergarh and in the State of Orissa as a whole. Poverty, ignorance, lack of normal facility for good living and unavailability of maternity facilities tell very heavily on the female population in the early stage of the re-productive

period. All these must be acute in the Rourkela region which accounts for the very low percentage of women in this age-group. But this cannot be an adequate explanation for this phenomenon. As has been pointed out earlier, there has been an influx of population belonging to the age-group of 25-30 on account of opening up of the region and expansion of mineral and agricultural activities. When migration takes place in search of occupation and employment, male population forms the large majority of such migrants. This is an important factor responsible for the great deficiency of women in this age-group.

30. Once women pass through the critical age-period of maternity, they enjoy a greater longevity. Poverty, neglect and arduous life tells heavily on women in the prime stage of their re-productive period; but at a later age the strife in life and exposure to various risks fall to the lots of men. Normally, therefore, women after crossing the critical child-bearing age, live much longer than men. That explains the excess of women population beyond the age of 55 in the Rourkela region. Apart from the differences in the actual excess, the fact is that for the whole of Orissa and Sundergarh as well as in Rourkela, women form a larger proportion of the population beyond the age of 55.

### *Family size*

31. Family is not only a unit of social organisation, but also an important economic unit. As an economic unit it is particularly significant in an agricultural society where the household earns jointly and spends jointly. The character of household may be different in an industrial centre. Rourkela has been predominantly an agricultural region. With the coming of the steel plant the organisation of the household in and around Rourkela may undergo some changes. But the existing pattern will long persist and the economic organization will have to take into account the prevailing system.

32. According to the census of 1951 the average size of a family in Orissa is constituted of 4.63 persons. Our investigation conducted about the same time as the Rourkela survey shows that for the rural areas of the State the average stands at 4.66. The following statement shows the average size of households, given caste-wise for Rourkela, Sundergarh, the coastal division of Orissa, the inland division and for the State of Orissa as a whole.

*Statement—X*

Family size—Caste-wise

Sl. No.	Region/District/ State.	Non-Schedu- led Hindus.	Schedu- led caste.	Schedu- led Tribe.	Other Religions.	Total
1.	Rourkela	5.83	5.65	6.34	6.54	6.16
2.	Sundergarh	4.79	4.28	4.56	5.14	4.99
3.	Coastal Division	4.57	4.35	4.94	4.69	4.55
4.	Inland Division	4.82	4.66	4.77	4.20	4.76
5.	Orissa	4.68	4.51	4.79	4.43	4.66

33. The statement shows clearly that the average size of a family in Rourkela is very much larger than in Sundergarh or in other parts of the State. In the inland division of the State, the average size in Sundergarh is even higher than for the inland division as a whole. But the significant fact that comes out of this statement is that in Rourkela region, the average size of the household is very much higher. While for the inland division it is 4.76 and for the district of Sundergarh as a whole 4.99, the average family size in Rourkela is constituted of 6.16 persons. Compared with almost every other State in India this size is exceedingly large. This shows that although the old joint family system is on the decline in the major parts of the State, in the Rourkela region large families still persist.

34. Details regarding families of different sizes will bring out the significance of the situation. The following statement shows the percentage of families of different sizes to the total number of families and the percentage of population in these households of various sizes.

*Statement—XI*

Percentage of families of different sizes and  
percentage of population in each size

Sl. No.	Region Dist./State	3 or less		4 to 6		7 to 9		10 and above.	
		Fami- lies.	Per- sons.	Fami- lies.	Per- sons.	Fami- lies.	Per- sons.	Fami- lies.	Per- sons.
1.	Rourkela	20.7	7.8	42.6	34.5	23.5	29.7	13.2	28.0
2.	Sundergarh	29.9	13.6	46.5	45.7	18.4	28.4	5.2	12.3
3.	Coastal division	38.7	19.6	44.1	47.0	12.9	21.7	4.3	11.7
4.	Inland division	33.4	16.7	46.9	47.9	15.5	24.9	4.2	10.5
5.	Orissa	35.8	18.0	45.6	47.5	14.4	23.5	4.2	11.0

It will be seen from this statement that the percentage of families with three or less persons is only 20.7 in Rourkela region against 35.8 for Orissa as a whole, and 33.4 in the inland division. Only 7.8 per cent of the population in Rourkela lives in such small families, whereas in Orissa as many as 18 per cent of the population are members of small families. Even in medium-sized families with four to six persons, Rourkela has a smaller proportion of population than elsewhere in the State. Most people in this region live in large families. In rural Orissa, families of very large size with ten members or more constitute only 4.2 per cent of the total number of families and 11 per cent of the population live in such families. It is a very great contrast with other parts of Orissa that in Rourkela region as many as 28 per cent of the total population live in very large families and such families constitute 13.2 per cent of the total number of families in this region. It is indeed a significant feature that 57.7 per cent of the population i.e. more than half the population live in large and very large families in the Rourkela region. The significance is particularly remarkable because the contrast is not only with reference to the different parts of the State, but also with regard to the district of Sundergarh.



35. Tribal families are usually larger than the families of non-scheduled-Hindus and of the scheduled castes. The large percentage of tribal population in Rourkela, makes the average family size large. But it should also be observed from Statement XI that even the tribal families in other regions of the State are not as large as in Rourkela and on the other hand the families of non-scheduled Hindus and of scheduled caste are also large in the Rourkela region. It appears that the social and economic pattern in this region is such as to favour the persistence of large families among all the various classes of the population. Large family is a normal socio-economic organization in this area. As has been pointed out earlier, the population below the age of 15 is very large in the Rourkela region compared to other parts of the State. Predominance of children necessarily implies large families. This factor is one of the causes why the size of household in the Rourkela region is large.

36. Size of the family is influenced by the nature of occupation. In predominantly agricultural communities families are large. Joint family is organised around the ownership of agricultural property. Where land owners are themselves cultivators and the man-land ratio is comparatively high, families tend to be large. Statement XII gives the average size of families in different occupations in the Rourkela region.

*Statement—XII*

Family size—Occupation-wise

Sl. No.	Occupation	Family size
1.	Agriculture	6.31
2.	Agricultural Labour	5.83
3.	Other Labour	5.51
4.	Trade	5.00
5.	Transport	6.00
6.	Production (Other than cultivation)	5.45
7.	Service and Professions	5.19
Total		6.16

37. This statement clearly points out that in agricultural occupation i.e. where land-owners cultivate their own lands, the average size of the family is 6.31 which is much larger than the families in any other occupation in this region. It may be noted that among agricultural labourers although the occupation is agriculture, the family size is smaller largely because of the fact that there is scarcely any landed property belonging to such families.

38. Large families are persisting in the Rourkela region mainly on account of the large proportion of tribal population and high man-land ratio among the agriculturists. The rigidity of social tradition has also been a major factor in the continuance of such large families. Nevertheless it is surprising that although the forces operating in the Rourkela region, are not different from those in the entire district of Sundergarh, the size of family in Rourkela is considerably larger than the average size for the whole district. In the matter of supply of labour to the industries and organization of economic life, this factor will play an important role.

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## CHAPTER III

### OCCUPATIONAL STRUCTURE

#### *Definition & Classification*

In analysing the occupational structure in the Rourkela region, the family has been taken as the operating unit of the economy and not the individual as was adopted in the Census of 1951. A family is defined for the purpose of this enquiry as a household having a common kitchen and comprising persons living under the same roof, including temporary absentees and excluding guests. The occupational pattern in this survey has therefore been analysed in respect of the 5,363 families in the Rourkela region.

2. The family is a more convenient unit of classification than the individual. In most occupations pursued in the villages, it is the family which practically supplies the whole of the labour force to the occupation concerned. This is particularly true in agriculture on account of the prevalence of the system of family farming. Under such circumstances the occupation of the head of the family cannot be described as his exclusive occupation. It indeed belongs to the family as a unit. It is a well-known feature of the rural economy that the income of the family is not only jointly earned, but also jointly spent. Family is thus the proper economic unit in the rural areas and an analysis of the various occupations family-wise would give a correct picture of the rural economy.

3. In the census of 1951, the individual was adopted as the basis of occupational classification. The livelihood pattern was drawn up on the basis of the principal means of livelihood followed by the individuals. Difficulties arose with regard to both earning dependents and non-earning dependents. Individuals belonging to these two categories were grouped under that livelihood category to which the earner on whom they were dependent

belonged. This was somewhat confusing, but there was no way out. This difficulty would not arise at all if the family is adopted as the economic unit for the purpose of analysing livelihood patterns. Further, it may be that in an agricultural household two or more adult members might be working on land. None of these members may be fully employed. It would be difficult to ascertain which of the persons is earner and which others are earning dependents. All these complications would be avoided if family is taken as the basis of classification.

4. The Census of 1951 broadly divided the livelihood patterns into agricultural and non-agricultural. The same broad division has been adopted in this survey. Families have been classified on the basis of their reported main occupation as agricultural or non-agricultural. The main occupation of a family is that occupation from which the family derives the major portion of its income. In a few cases the subsidiary occupation was reported by the heads of the families as the principal occupation, because that particular occupation implied a higher social status. But such cases were exceedingly few and income was the basis adopted in ascertaining the principal occupation. Although the two main occupational groups in the survey are the same as they were in the census, there have been certain differences in regard to the subdivisions under these two major groups. The agricultural families have been sub-divided into:

- (1) Owner Cultivators.
- (2) Non-owner Cultivators.
- (3) Non-cultivating Owners.
- (4) Agricultural labourers.

The non-agricultural families which derive the major portion of their income from non-agricultural occupation, have been sub-divided under:—

- (1) Non-agricultural labour.
- (2) Trade.
- (3) Transport.

- (4) Production other than cultivation.
- (5) Services and professions.

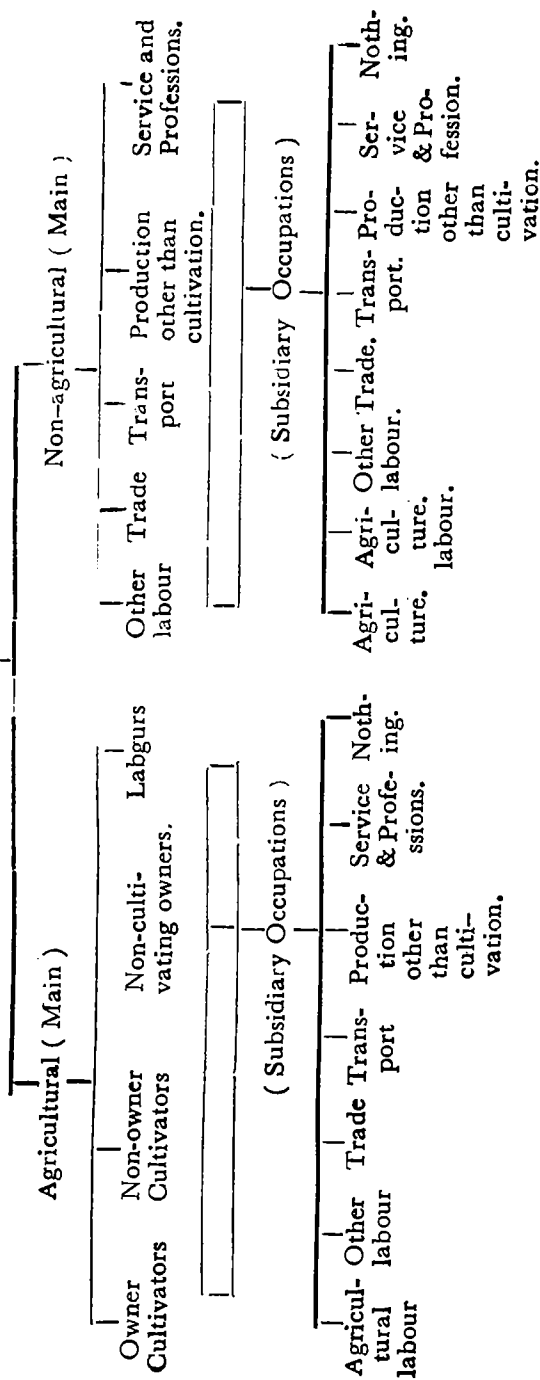
5. Classification of families on the basis of the principal occupations does not furnish a complete picture of the occupational structure. There are various types of subsidiary occupations followed by different families. It is a matter of common knowledge that in most cases agriculture does not provide full employment to all the members of the family, nor is the income adequate for the needs of the household. Subsidiary occupations for agricultural households have to be found to an increasing extent for the promotion of a developed rural economy. It is, therefore, necessary to find out what place do subsidiary occupations occupy in the life of the agricultural families in the Rourkela region. Again in the rural areas, even though some families have some kind of non-agricultural occupation as their principal means of livelihood, for both social and economic reasons, agriculture is undertaken as a subsidiary occupation. Therefore, for obtaining a complete picture of the occupational structure, subsidiary occupations have also to be analysed along with the main occupations pursued by the households.

6. Accordingly, the scheme of classification adopted and analysed in this chapter has been as follows:—

#### *Occupational Classes*

7. The following statement shows the distribution of families under the two broad groups of agricultural and non-agricultural occupations.

## OCCUPATIONS.



*Statement—XIII*

General Occupational Division			
Sl. No.	State District Region	Agricultural families	Non-agricultural families.
1.	Rural Orissa	82·9	17·1
2.	Rural areas of Sundergarh	82·3	17·7
3.	Rourkela	84·8	15·2

8. Orissa is an agricultural country. The inland division of the State is more dependent on agriculture than the coastal region. The statement shows that the Rourkela region is even more agricultural than the district of Sundergarh. Of all the families in rural Orissa, 82·9 per cent have agriculture as their principal means of livelihood. The rural areas of the district of Sundergarh have, on the average, about the same proportion. But the 98 villages comprising the Rourkela region contain a larger percentage of families i.e. 84·8 per cent, which has agriculture as the principal means of livelihood. Although in the district of Sundergarh quite a significant percentage of rural population finds employment in dolomite and lime-stone quarries and thus non-agricultural occupation provides livelihood to a good number, the Rourkela region depends on agriculture to a much larger extent than the district of Sundergarh, considered as a whole.

9. The relative proportions of the population in the different sub-groups under the two main divisions will throw much greater light on the occupational structure in the Rourkela region. The Statement XIV given below shows the composition of the agricultural and non-agricultural classes in different sub-groups.

10. It will be noticed from the statement that the owner-cultivators in the Rourkela region constitute a very large percentage of the total number of households. The percentage is 78·7 whereas for the district of Sundergarh it is 70·3. For the entire rural Orissa, the percentage of owner-cultivators to the total number of households is only 56·4 i.e. a little more than half.

# STATEMENT XIV.

## AGRICULTURAL AND NON-AGRICULTURAL CLASSES.

AGRICULTURAL CLASSES										NON-AGRICULTURAL CLASSES.					
Sl. No.	State/District/ Region.	Owner Cultivator.	Non-owner cultivator.	Non-cultivating owner.	Agricultural labour	Others.	Total.	Non-Agricultural labour.	Trade.	Transport.	Production other than cultivation.	Service and Profession	Total.	Non-given.	Grand Total.
1.	Rural Orissa	56.4	3.1	1.6	21.6	0.2	82.9	2.3	1.7	—	6.0	5.4	15.4	1.7	100.0
2.	Rural areas of Sundergarh.	70.3	1.5	0.5	9.9	0.1	82.3	8.7	0.5	—	4.0	4.3	17.5	0.2	100.0
3.	Rourkela	78.7	1.1	0.3	4.6	0.1	84.8	5.9	1.8	2.1	3.6	1.5	14.9	0.3	100.0



The fact that about 4/5ths of the total families in the Rourkela region are owner-cultivators clearly shows not only the predominantly agricultural character of the region, but also the wide distribution of agricultural land among the inhabitants. While 21.6 per cent of the total rural families in Orissa come under the category of landless labourers, in the district of Sundergarh, such families constitute 9.9 per cent. Against this picture, it is easy to see how small the population of landless labour is in the Rourkela region. The fact that only 4.6 per cent of the households belong to landless agricultural labour families is a clear evidence that the supply of agricultural land in this area for the inhabitants is comparatively large and that there is wide diffusion of ownership. Non-owner cultivators are only 1.1 per cent and land-owning families which do not cultivate at all are only three in a thousand. All these clearly show that almost the entire agricultural population in the Rourkela region consists of families which own their cultivated lands.

11. The non-agricultural classes, as has already been stated, constitute a smaller percentage in Rourkela; and the composition of these families under the various sub-groups further brings out the comparative backwardness of this region. The non-agricultural labour in the district of Sundergarh forms a greater proportion of the population than in 98 villages in Rourkela. This is largely because labour in quarries offer employment to a larger area in the State. It should be observed that in trade and transport Rourkela offers larger opportunities for employment than in the district of Sundergarh as a whole. This is probably because of the fact that Railway Station at Rourkela has created opportunities for such occupations. But the significant features are still brought out by the low percentage of population engaged in production other than cultivation and in services and professions. These are symptoms which show that the economy at Rourkela is comparatively more undeveloped in character. Services and professions provide employment to only 5.4 per cent of the rural population in Orissa and to 4.3 per cent in the rural areas of Sundergarh. These are evidences of social and economic

under-development. In the Rourkela region only 1·5 per cent of the families have services and professions as their principal occupation. This indicates that within the general underdeveloped character of the district of Sundergarh, Rourkela is particularly under-developed.

### *Class-wise Distribution*

12. In view of the fact that socially and economically there are salient differences among the broad caste-groups and tribal groups, it is necessary to analyse the occupational distribution among the broad classes of the community in the Rourkela region. Statement No. XV given below shows the class-wise distribution of the main occupational categories.

13. Certain occupations in the existing social structure are confined to certain classes of the community. Supply of talent and labour for particular kinds of employment is to be viewed in the context of the class composition of the population; but the statement given above shows that differences in the matter of occupations among the broad divisions of the population in Rourkela are exceedingly small. Although this area is predominantly tribal in character, the non-scheduled Hindu families have almost similar pattern of occupations as the scheduled tribes and scheduled castes. There are no doubt certain differences, but in the broad picture these differences are of minor significance.

14. It may nevertheless, be seen that while 84·3 per cent of the tribal families have agriculture as their main occupation, among the non-scheduled Hindus it is 76·1 and among the scheduled castes, 72·6. Thus while the Rourkela region is predominantly agriculture in character, the tribal families are agricultural to even a greater extent. The fact that among the scheduled castes agriculture is pursued as the main occupation by a smaller percentage of families does not indicate that economically they are better off in non-agricultural pursuits. Many of them are in occupations which are not more gainful than

# STATEMENT XV.

## CASTE-WISE DISTRIBUTION OF ALL THE FAMILIES AMONG THE MAIN OCCUPATIONS.

Sl. No.	C A S T E.	M A J O R O C C U P A T I O N S.						Total.
		Agri- culture.	Agri- cultural labour.	Non- Agri- cultural labour.	Trade. port.	Trans- cultivation	Production other than and Profes- sion.	
1.	Non-scheduled Hindus...	76.1	4.8	6.2	2.5	0.8	5.6	100.0
2.	Scheduled caste ...	72.6	4.3	8.5	0.4	2.1	9.7	100.0
3.	Scheduled Tribes ...	84.3	4.8	6.0	(0.04)	3.1	1.2	100.0
4.	Other Religion ...	81.0	4.2	3.4	6.0	1.5	2.9	100.0
Total ...		80.2	4.6	5.9	1.8	2.1	3.6	100.0

( 35 )

agriculture. It will also be observed from the statement that only 4.6 per cent of the families are landless and earn their livelihood as agricultural labourers. Among the different caste groups in this region, this percentage is almost the same.

15. It is significant to observe that scheduled castes and scheduled tribes have almost no share in trade in this region. It is mostly in the hands of the non-scheduled Hindus and families belonging to other religions. This occupation is one of the most lucrative in the area and the scheduled castes and tribes have not, so far, been able to enter into this occupation. In transport, on the other hand, these castes and tribes find employment, where the share of the non-scheduled Hindus is exceedingly small. Transport in this region, it should be pointed out, is of primitive type. In activities connected with production other than cultivation, only 1.2 out of every 100 scheduled Hindu families find employment which is considerably greater in the case of non-scheduled Hindus and scheduled castes. This category of occupation includes various types and those undertaken by the scheduled caste families are usually of inferior economic importance. What is true of 'production other than cultivation' is also true in respect of 'the service and profession', where the share of the tribal classes is negligible and non-scheduled Hindus have 3.5 per cent of their families in such occupations. The scheduled castes also find employment for 2 per cent of their families in such occupations although the type of service and profession pursued by them is different from those where the non-scheduled Hindus find employment. The broad picture that emerges from this statement is that while 10.8 per cent of the tribal families are engaged in non-agricultural pursuits, 19.1 per cent of the non-scheduled Hindus and 23.1 per cent of the scheduled castes are employed in such occupations. Compared to other classes, therefore, the tribal families are distinctly more agricultural in their occupations.

#### *Agricultural Status*

16. Among the families which pursue agriculture as main occupations, there are owner-cultivators, non-owner cultivators,

non-cultivating owners and agricultural labourers. It is necessary to analyse the different sub-groups in this region in respect of these four types of agricultural status among the mainly agricultural families. Statement No. XVI given below provides this information.

17. Among the agricultural families, as many as 92·7 per cent are owner-cultivators. Among the scheduled classes, it is slightly higher than what it is among other classes. But this difference is scarcely of any significance. The fact remains that the overwhelming percentage of the agricultural families are owner-cultivators in status. The landless agricultural labourers constitute 5·5 per cent and that also is evenly distributed among the broad classes. It is thus clear that in Rourkela, where agriculture is overwhelmingly the main occupation, agriculturists are overwhelmingly the land-owners themselves. Non-cultivating owners constitute only 1·3 per cent of the agricultural families. Among the tribal classes, it is less than 1 per cent and among the non-scheduled Hindus slightly more than 2 per cent. It will also be observed from the statement that 1·4 per cent of the scheduled caste families are non-cultivating owners. This does not mean that these owners have leased out their lands to live as idle rentiers. Some of them belonging to this category have only small bits of land and it has not been found practicable to cultivate those small bits. Accordingly these plots have been leased out to comparatively substantial farmers. The exceedingly small percentage of non-owner cultivators among all the different classes clearly shows that there are very few landless families in this region. It is unusual for these families to take lands on lease for cultivation. Families which have no lands—and such families are only a few—take to agricultural labour or non-agricultural pursuit.

18. It is thus evident that from the point of view of agricultural status among the agricultural families, there is no distinction among the different classes of the population. It is also clear that there is wide diffusion of land-ownership and a

# STATEMENT XVI.

## AGRICULTURAL STATUS OF THE MAINLY AGRICULTURAL FAMILIES

(Caste-wise) (Percentage)

Sl. No.	Caste.	A G R I C U L T U R A L S T A T U S				Total
		Owner Cultivators	No-owner cultivators.	Non-cultivating owners.	Agricultural labourers.	
1.	Non-scheduled Hindus	91.5	0.4	2.1	5.9	100.0
2.	Scheduled castes	92.7	0.2	1.4	5.5	100.0
3.	Scheduled Tribes	93.3	0.2	0.9	5.4	100.0
4.	Other Religions	92.9	0.8	1.3	4.9	100.0
Total		92.7	0.4	1.3	5.5	100.0

overwhelming percentage of agricultural families are land-holders among all the different classes. The problem of rentier class does not exist in this region and landless families scarcely take to agriculture as their main occupation.

### *Subsidiary Occupations*

19. If a family has some main occupation which provides adequate employment or reasonable income, then it need not take to any subsidiary occupation. But in the rural areas of Orissa, where the land-holdings are largely uneconomic in size and do not provide adequate employment to the members of the household, subsidiary occupation is necessary to supplement the landed income. Besides, agriculture, in its present state, is of such character that there are periods of activity and recession from time to time in course of the year. Without significant secondary occupation, rural families cannot find sufficient employment for their members or reasonable income for their support. One of the major problems of economic developments is to provide subsidiary and gainful occupations in rural areas. In this context, it is necessary to analyse the type and volume of subsidiary occupations available in the Rourkela region.

### *Subsidiary occupation of mainly Agricultural Families*

20. Among the mainly agricultural families are included the three categories—owner-cultivators, non-owner cultivators and non-cultivating owners. Although agricultural labour comes under the main category of agricultural occupation, this has not been included here among the mainly agricultural families, because it is necessary to find out how many of the agricultural families belonging to first three categories have agricultural labour as one of their subsidiary occupations. The following statement (No. XVII) shows the different kinds of subsidiary occupations pursued by the mainly agricultural families.

*Statement—XVII**Subsidiary Occupation of mainly Agricultural Families*

Agricultural labour	28.1
Non-agricultural labour	31.3
Trade	0.9
Transport	4.3
Production other than cultivation	5.5
Services and profession	3.4
Nothing	26.5
<hr/>	
Total families	100.0

21. The necessity of a subsidiary occupation for the agricultural classes arises mainly from the fact that it serves as a second string to their bow. Out of the 5363 families surveyed, it was found that agriculture is the main pursuit of 4550 families. Of these agricultural families, 31.3 per cent have non-agricultural labour as their subsidiary occupation. This is a striking feature in Rourkela. It was found from the all-Orissa Survey that in the rural areas of Orissa 10.3 per cent of the agricultural families undertake non-agricultural labour as their subsidiary occupation. The percentage for rural areas of Sundergarh is only 3.1. In the context of this general feature, it is indeed striking that as high a proportion as 31.3 of the mainly agricultural families in the Rourkela region finds subsidiary employment in non-agricultural labour. It is true that in off seasons some people go in for work in the different quarries in various parts; but that cannot be of such significance as to provide subsidiary employment to such a large section of the population. The chief items under "Non-agricultural labour" are employment under contractors, in the Bisra lime works and in the railway station. The main reason for the large volume of subsidiary non-agricultural labour is due to the fact that at the time when the survey was conducted, preliminary constructional activities in connection with the Rourkela steel plant were in operation. These provide opportunities to agriculturists to work as wage-earners in the Steel Plant area—of course, as unskilled workers. Such work was undertaken



either by persons who do not have sufficient employment in agriculture or by others, in off seasons.

22. Next, in order of importance as subsidiary occupation, comes agricultural labour, providing employment to 28.1 per cent of the mainly agricultural families. Many of the families which are owner-cultivators do not have sufficient land for their maintenance and some members of these families have to work as agricultural labourers in the farms of other agriculturists. Further, in particular seasons the work on lands may be too heavy for the working members of the family though there are very lean periods at other times. Cultivating families with small holdings usually work in each other's lands at different times as agricultural labour. As long as a large number of agricultural holdings are small in size and other attractive avenues of employment are meagre, many of the agricultural families have to undertake agricultural labour in others' farms to eke out a subsidiary income. This is a general feature in the rural areas and the conditions at Rourkela are in keeping with the situation elsewhere.

23. It will also be observed from the statement that trade as a subsidiary occupation is insignificant. This is because traders, which include shop-keepers, find full-time employment in this occupation and there is not much room for agriculturists to take it up as a spare-time employment. Transport is however of a different category because most of what goes under the name of transport is indeed an extension of agricultural operation. Services and professions and production other than cultivation are undertaken as subsidiary occupation; but they cannot be taken as of any major significance.

24. Although agricultural and non-agricultural labour provide subsidiary occupation to a very large percentage of agricultural families and certain other types of work also provide some employment opportunities, 26.5 per cent of the agricultural families do not have any secondary source of livelihood. For

the whole of rural Orissa and the district of Sundergarh, agricultural families with no subsidiary occupation constitute more than 50 per cent. Rourkela, therefore, is in a very favourable situation. While only half of the agricultural families in Orissa and Sundergarh has some sort of subsidiary occupation, in the Rourkela region about 3|4th of such families are able to find subsidiary employment. It would appear that the economy of Rourkela provides better employment opportunities than the economy elsewhere in Orissa. But, as has been pointed out earlier, this is largely due to the fact that 31.3 per cent of such families are employed as non-agricultural labour and many of them, on account of the starting of the constructional work at the steel plant. Had it not been so, the extent of subsidiary occupation in Rourkela for agricultural families would not perhaps have been much different from 50 per cent, as is the overall situation in Orissa. The very start of the industrial plant has begun to affect the volume of subsidiary occupation at the time the survey was conducted.

*Subsidiary Occupation of the Non-agricultural Families*

25. Statement XVIII below shows the percentage of non-agricultural families following various subsidiary occupations.

26. It will be seen from the statement that the major subsidiary occupation for non-agricultural families is agriculture. Of these families, 36.9 per cent pursue agriculture as secondary occupation. This is a normal feature of our overwhelmingly agricultural economy. Either a family is agricultural or, if it is non-agricultural, agriculture is one of the main subsidiary occupations. This picture is true of the entire State as it is in Rourkela. Besides the 36.9 per cent pursuing agriculture as subsidiary occupation, 2.1 per cent of the non-agricultural families derive some income by taking to agricultural labour. It has already been pointed out that transport in this region is largely of primitive type and is an extension of agricultural pursuit. Of the total non-agricultural families, 53.2 per cent, with transport as the principal means of livelihood have agricul-

# STATEMENT XVIII

## SUBSIDIARY OCCUPATIONS OF THE MAINLY NON-AGRICULTURAL FAMILIES.

Sl. No.	Main Occupations	SUBSIDIARY OCCUPATION							Total
		Agri- culture.	Agricul- tural labour.	Non-Agri- cultural labour.	Trade.	Trans- port.	Indus- try.	Service & Profes- sion.	
1.	Non-agriculture Labour	39.1	...	...	0.3	...	2.2	1.6	56.8 100.0
2.	Trade	9.4	1.1	2.0	...	1.1	...	2.0	84.4 100.0
3.	Transport	53.2	0.9	...	...	...	1.8	...	44.1 100.0
4.	Industry	34.9	4.6	9.8	...	1.5	..	1.0	48.2 100.0
5.	Services & Profession.	44.4	6.2	4.9	...	1.2	3.7	...	39.6 100.0
6.	Not given	33.3	6.7	6.7	...	...	...	...	53.3 100.0
TOTAL.		36	2.1	3.2	0.1	0.6	1.5	1.1	54.5 100.0

ture as the subsidiary occupation. Among the various non-agricultural groups with agriculture as secondary pursuit, transport heads the list. It will also be seen from the statement that among the trading families only 9.4 per cent take to agriculture as subsidiary occupation. This is significantly different from all the other non-agricultural families. It has been indicated earlier that trade is largely a wholetime occupation and therefore very few agricultural families take to trade as subsidiary occupations and similarly very few trading families take to agriculture as a subsidiary occupation. As subsidiary occupations, all the different types of secondary non-agricultural pursuits taken together are of minor importance to the non-agricultural families in this region, providing employment to only 6.5 per cent of these families.

27. While only 26.5 per cent of agricultural families have no subsidiary occupation, among the non-agricultural families, as high a proportion as 54.5 per cent does not have any secondary employment. In absolute terms, this may not be very significant, in as much as the non-agricultural families form only 15.2 per cent of the total number of families in Rourkela. Nevertheless, either because some of the non-agricultural occupations provide wholetime employment or because members of many of these families are not desirous of taking to employment created in the constructional work at the Steel Plant area, more than half the non-agricultural families do not pursue any secondary occupation in this region.

### *Subsidiary Occupations Overall Picture*

28. The statement No. XIX below shows the relative importance of the different subsidiary occupations in the Rourkela region.

29. Agriculture provides subsidiary occupation to 8 per cent of the families and agricultural labour, to 21.7 per cent. Tribal

**STATEMENT XIX**  
**SUBSIDIARY OCCUPATIONS OF ALL FAMILIES.**

Sl. No.	Main Occupations,	SUBSIDIARY OCCUPATIONS.								Total
		Agri- culture labour.	Agricul- tural labour.	Non-Agricul- tural labour.	Trade.	Trans- port.	Industry.	Service and Pro- fession.	Nothing.	
1.	Non-scheduled Hindus	8.0	18.2	16.6	1.3	6.3	6.4	6.0	37.2	100.0
2.	Scheduled Caste	11.0	11.5	29.8	0.2	4.3	11.4	2.5	29.3	100.0
3.	Scheduled Tribes	6.8	26.1	34.9	0.2	2.5	2.5	1.1	25.9	100.0
4.	Other Religions	9.4	22.6	22.3	2.1	2.8	4.5	3.7	32.6	100.0
TOTAL		8.0	21.7	27.0	0.8	3.8	4.9	3.1	30.6	100.0

families and families belonging to other religions take to agricultural labour as subsidiary occupation to a much larger extent than the non-scheduled Hindus and the scheduled castes. To non-agricultural labour, scheduled tribes take in large numbers, whereas non-scheduled Hindus taking to this as subsidiary occupation is considerably small. It appears that in constructional activities, many of the non-scheduled Hindu classes do not find suitable employment opportunities and workers belonging to the scheduled tribes find therein congenial secondary occupation. The largest subsidiary occupations in the Rourkela region is non-agricultural labour and 27 per cent of the total families in this region find subsidiary employment in this work. Non-agricultural labour, agriculture and agricultural labour 56.7 per cent of subsidiary occupations and all other secondary occupations are of minor importance. It is significant to note that the major secondary occupation is non-agricultural labour created largely on account of the construction work at Rourkela and the scheduled tribes have adjusted themselves to a much greater extent to the new sphere of employment opportunities than the other classes. It will be seen from the statement that 30.6 per cent of the total households have no subsidiary source of livelihood. The proportion is about half for the whole of Orissa and for the district of Sundergarh. This striking contrast is largely due to the fact that while 2.8 per cent of the families in the rural areas of Orissa pursue non-agricultural labour as a secondary employment, in the Rourkela region, it is as high as 21.7 per cent. The type of work in the constructional activities which provided employment in Rourkela was unskilled in character and the tribal families taking to this work as a major secondary employment is of particular significance.

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## CHAPTER IV

### AGRARIAN PATTERN

#### *Man-land ratio*

1. In an economic survey of a region which is predominantly agricultural in character, it is fundamental to analyse the various problems concerning agricultural land. It has been shown earlier that within the dominantly agricultural economy of Orissa, the Rourkela region is overwhelmingly agricultural. This is only a broad picture to understand the nature and efficiency of this agricultural economy. It is necessary to analyse the extent of land available, the size of the holdings, the distribution of ownership, the type of rights and the like in order that a detailed picture can be drawn up with regard to the strength and weakness of the rural economy at Rourkela. Such a picture would bring out not only the state of the economy but also the social and economic organisation in the region. On the basis of this analysis, it will be possible to assess to what extent the time and resources of the cultivators are being utilised and in what way reforms and re-organisations can be attempted.

2. At the outset it is necessary to show how much land there is with reference to the size of population in the Rourkela region. A comparison with other regions is always of particular significance. It will, however, be scarcely of any use to compare the per capita land available in Rourkela with the man-land ratio in some of the major countries like Canada, United States of America, Australia and Newzealand. In these countries the amount of land per head of population is extremely large and with the aid of modern techniques and machinery, agriculture in those countries has been commercialised. The situation in Rourkela should be compared with what obtains in the district of Sundergarh and in the State of Orissa as a whole. That will furnish an analysis of the situation in the midst of comparable and similar situations with which we are intimately concerned,

It was found in our survey that the total area of agricultural land in the Rourkela region was 38,795 acres, giving a per capita land of 1.17 acres. The following statement gives a comparative picture of man-land ratio.

*Statement—XX*  
Man-land ratio

Region	Per Capita owned land (in acres)
Orissa	0.82
Coastal region	0.62
Inland region	0.97
Sundergarh district	1.27
Rourkela region	1.17

3. The per capita supply of agricultural land in Orissa is about 4/5ths of an acre. In the region which is much over-crowded compared with the inland districts, the availability of agricultural land per head of population is about 3/5ths of an acre and in the inland districts, it is about an acre. The Census report of 1951 shows that the available agricultural land per head of population is the highest in the district of Sundergarh compared to all the other districts of the State. In our survey, it was found that the per capita owned land in this district is 1.97 acres. In this district, the supply of agricultural land compared to the population is comparatively larger. The 98 villages in and around Rourkela region have 1.17 acres of land per head of the population. Thus the pressure of population in this region is greater than what it is in the district of Sundergarh taken as a whole. It has been pointed out earlier that agricultural classes in Rourkela form a larger percentage of total population than in the rural areas of Sundergarh. This being so, when the supply of agricultural land per head of population in the Rourkela is less than in the district of Sundergarh, the Rourkela economy appears to be in a position of comparative disadvantage.

4. It would be useful to have an account of how the position has been changing during the last few decades. But such



information is not available. It is a matter of common knowledge that the man-land ratio has been progressively declining. The Census report of 1951 points out that the per capita cultivated area in the district of Sundergarh has declined by about 30 per cent since 1921. In the absence of statistical material in this respect regarding the Rourkela region, it may be assumed that this rate of decline may have been in operation in the Rourkela region. Obviously the rapid growth of population has been responsible for this decrease in the man-land ratio. With the accessibility of the various parts in the district of Sundergarh, in-migration took place and new lands were brought into cultivation. But inspite of this, the rate of population growth has been much faster than the area available for agriculture. Evidences are not forthcoming to show if there has been any special factors operating in Rourkela. Therefore the progressive deterioration in the per capita land supply in the Rourkela area has been continuing in the same manner as in the district of Sundergarh.

### *Size of Agricultural holdings*

5. The term holding has been used in more than one sense and this has created some amount of confusion. Some have used it to mean a unit of land from the point of view of proprietorship, no matter whether individual or joint. Some others have used the expression to indicate an area of land belonging to an individual holder. None of these definitions appears to have much significance from the point of view of economic analysis in the present context. The concept of an agricultural holding must be correlated with the household. It has already been explained that the family has been accepted in this survey as the economic unit par excellence. It is, therefore, analytically useful and significant from the practical standpoint to define holding as the area of land over which a family has permanent and hereditary right in any capacity.

6. An agricultural holding includes all the cultivable lands owned by a family. The term owned holding takes into account the entire cultivated land including the current fallows. Waste

lands, house sites and permanent fallows have been excluded from agricultural holdings. On account of seasonal conditions and particular difficulties experienced by any family during the year of survey, some lands might have been left uncultivated. These are in fact current fallows and have been included under the term, 'agricultural holdings.'

7. While the supply of per capita land indicates the quantum of land from which every man, woman and child draws sustenance, the average size of holdings brings out the prevalent type of the agrarian structure and the soundness or weakness of the farmer's economy. Our investigation showed that in the Rourkela area there are 4,864 families owning 38,975 acres of land. Our investigation was conducted in respect of all the families in the 98 villages of Rourkela. So far as the whole of Orissa was concerned, it was a sample survey. The following statement (XXI) shows the relative position in Rourkela compared with the situation in the district of Sundergarh and for the State of Orissa as a whole.

*Statement—XXI*

Region	Average size of holding owned		
	Number of families owning land	Area of owned land (acres)	Average size of holding (acres)
Rourkela	4864	38795.0	8.0
Sundergarh district			
(Sample survey)	2691	21377.5	7.9
Coastal region			
(Sample survey)	31203	110429.0	3.5
Inland region			
(Sample survey)	36825	236773.0	6.4
Orissa			
(Sample survey)	68027	347202.0	5.1

8. The average size of agricultural holdings in the Rourkela area is 8 acres per owning family. In the district of Sundergarh where 2,691 land-owning families were surveyed, the average size of the holding is almost the same, i.e. 7.9 acres. This picture for Sundergarh as well as for Rourkela is very different from the average size for the whole of Orissa which is only 5.1 acres. This is in keeping with the difference in man-land ratio. The average size of holdings in the inland region of the State is very much larger (6.4 acres) than in the coastal region where it is only 3½ acres. Compared with the State as a whole and the coastal districts in particular, Rourkela shows a much better farmer's economy. The pressure of population in this region has been much less and the size of holdings is appreciably larger. Other things remaining equal, the agricultural economy in the Rourkela region would indicate a situation of comparative soundness.

9. Average is only an overall picture. There may be a few exceedingly large holdings and a large number of small ones. This may give a satisfactory average size of ownership. But this state of affairs will not be satisfactory from the point of view of either productive efficiency or distributive justice. It is necessary to examine the distribution of holdings under different size-groups. Statement No. XXII below shows the distribution of holdings among the different owning families.

*Statement—XXII*

Percentage of families with  
different sizes of holdings

Sl. No.	Region	Size of holding in acres			
		Under 2	2-4	5-9	10 and above
1.	Rourkela	12.6	29.3	32.8	25.3
2.	Sundergarh				
	District	12.5	35.0	28.6	23.9
3.	Coastal region	49.8	31.3	12.3	6.6
4.	Inland region	24.2	36.3	22.8	16.7
5.	Orissa	36.0	34.0	18.0	12.0

10. The statement shows that, taken as a whole, in Orissa as many as 70 per cent of the families own holdings below the size of 5 acres. This is a clear evidence that most of the land holdings in Orissa are very small in size. In the coastal region where man-land ratio is much smaller than in the inland districts, such small farms constitute 81.1 per cent of the total number of holdings. The position is slightly better in the inland region where 60.5 per cent of the owning families have holdings less than 5 acres in size. Among the districts in the inland region, Sundergarh is in a comparatively better position in this respect where 47.5 per cent of the holdings come under this size-group. In the Rourkela region small holdings are not even as numerous as they are in the district of Sundergarh. In the 98 villages of Rourkela, only 41.9 per cent of the owning families have holdings below 5 acres in size. Small holdings present a serious problem in the agricultural economy and although in the Rourkela region a large number of holdings are small in size, it is important to note that the situation in this region is much better than almost in any other part of the State.

11. The distribution of holdings owned by families is further analysed below in Statement XXIII showing under broad groups of very small, small, middle and large holdings. Holdings below 6 acres in size are taken as very small, between 6 to 10 acres as small, 11 to 33 acres as medium and 34 acres and more as large holdings.

## STATEMENT—XXIII.

PERCENTAGE OF VERY SMALL,  
SMALL, MEDIUM AND LARGE HOLDINGS.

Region	0-5 Acres		6-10 Acres		11-33 Acres.		34 & above	
	Percentage of holding.	Percentage of land.	Percentage of holding.	Percentage of land.	Percentage of holding.	Percentage of land.	Percentage of holding.	Percentage of land.
1	2	3	4	5	6	7	8	9
Rourkela	51.4	21.1	26.6	27.2	20.6	42.9	1.4	8.8
Sundergarh Dist.	56.4	23.1	23.0	23.7	19.0	41.4	1.6	11.8
Coastal region	57.6	49.2	27.7	21.4	13.3	19.0	1.4	10.4
Inland region	79.8	30.0	11.2	22.3	7.9	34.1	1.1	13.6
Orissa	76.4	36.1	13.8	22.0	8.7	29.4	1.1	12.5

12. The statement shows that a little more than half the holdings in the Rourkela region are below 6 acres in size, containing 21.1 per cent of the total owned land. For Orissa as a whole, small farms constitute more than 3|4ths of the total holdings, containing 36.1 per cent of the total owned lands. The percentage of small farms in Rourkela is considerably less than the percentage in Orissa, in the Inland region, in the coastal region and also in the district of Sundergarh. This is an important feature worthy of note. If we examine the case of large holdings of 34 acres and above, it will be seen that the percentage of land coming under such holdings is much less in Rourkela than in Orissa, in the Coastal region, in the inland area and also in the district of Sundergarh. Thus large holdings as well as very small farms are fewer in Rourkela than elsewhere in the State of Orissa. This is distinctly a comparatively healthier agrarian situation. Small and medium holdings necessarily constitute a larger proportion of holdings in the Rourkela region. While for the whole of Orissa, 22.5 per cent of the holdings are small and medium in size and about half the total owned lands comes under

these categories, in Rourkela, 47·2 per cent of the holdings are small and medium in size and 70·1 per cent of the total owned land is in holdings of small and medium sizes. Compared either with the entire State or the inland region or the coastal areas or even the district of Sundergarh, there is greater concentration of land in the groups of holdings between 6 to 33 acres. Rourkela is thus in a distinctly better situation from the point of view of the size of holdings owned by agricultural families.

13. The statistical informations can be analysed in greater details which would confirm further the conclusion arrived at in the preceding paragraphs. Statement XXIV brings out a comparative picture of the percentage of holdings of different sizes and the percentage of land coming under the various groups.

14. In this statement, materials of the Statement XXIII have been presented in greater details. It is a very discouraging state of affairs to observe that in Orissa as a whole, the largest percentage of holdings is less than 2 acres in size. They constitute 36 per cent of the total holdings and contain 7·3 per cent of the total owned land. The coastal districts present a worse picture where about half the total number of holdings containing 13·7 per cent of the owned land is in holdings of less than 2 acres in size. As against this picture, in the inland region the largest percentage of holdings i.e. 36·6 per cent comes under the size of 2 to 4 acres. This is also true with regard to the district of Sundergarh. The striking feature to be observed from this statement is that while the largest proportion of holdings in Orissa and in the coastal region is less than 2 acres in size and the largest proportion of holdings in the inland region and in the district of Sundergarh is between 2 to 4 acres in size, so far as the Rourkela area is concerned the largest proportion i.e. 32·8 per cent of the holdings is between 5 to 9 acres in size. This is a significant difference which shows how the holdings in Rourkela are distinctly better from the point of view of size than anywhere in the State of Orissa.

# STATEMENT XXIV

## DISTRIBUTION OF LAND HOLDINGS OF DIFFERENT SIZES

( Percentage )

Size of holdings. (in acres)	Raurekela		Sundeergarh		Inland		Coastal		Orissa	
	Holding.	Area.	Holding.	Area.	Holding.	Area.	Holding.	Area.	Holding.	Area.
Less than 2 acres—	12.6	1.6	12.5	2.0	24.1	4.3	49.8	13.7	36.0	7.3
2-4	29.3	12.8	35.0	14.9	36.3	18.8	31.3	28.6	34.0	21.9
5-9	32.8	29.2	28.6	25.5	22.8	24.5	12.2	23.5	18.0	24.2
10-14	13.9	21.3	11.3	17.5	8.2	15.5	3.5	11.7	6.0	14.3
15-19	5.7	12.3	5.8	12.0	3.5	9.0	1.3	5.9	2.5	8.0
20-24	2.4	6.8	2.7	7.3	1.8	6.0	0.3	3.9	1.3	5.4
25-49	2.9	11.9	3.3	2.8	2.6	12.9	0.9	7.6	1.7	11.2
50-99	0.4	3.4	0.7	6.3	0.6	5.9	0.2	3.5	0.4	5.1
100 and above	0.04	0.7	0.1	1.7	0.1	3.1	0.1	1.6	0.1	2.6

15. It will also be observed that very large holdings of 100 acres and above in size in Rourkela constitute a much smaller proportion of the owned area than for the whole of Orissa, the inland region, the coastal region and the district of Sundergarh. The total area in the Rourkela region which is in holdings of 100 acres and more constitute only 0.7 per cent of the owned land. The percentage is very much greater elsewhere. Even in regard to the holdings of 50 to 99 acres, Rourkela has a much less proportion of the owned land than elsewhere in Orissa. All these are clear evidences that the size of holdings in Rourkela are distinctly conducive to a better agrarian economy, than is the case of almost any other part of the State of Orissa.

#### *Unit of Cultivation*

16. A study of the distribution of holdings is important to understand the distributive justice and the productive incentive in an agrarian economy. But this does not indicate the operational efficiency of cultivation. The size of holdings actually cultivated by farmers would show how far holdings are efficient from the point of view of cultivation. All land owned by families is not cultivated by the families concerned. Again there are owners who do not cultivate the land they own. There are non-owner cultivators as well. Along side the distribution of ownership, it is necessary to analyse the size of the operational units i.e. the size of actual holdings cultivated either by owner cultivators or by non-owner cultivators. A unit of cultivation is the amount of land actually cultivated by a peasant. It includes his own land which he cultivates and the land taken by him on lease. This forms the operational unit of cultivation. A study of the size of cultivation units and the nature and technique of cultivation would bring out to what extent the time and resources of the cultivators are being utilised. This study is, therefore, significant to understand the nature of the farmer's economy.

17. The area of land owned by the families in the Rourkela region comes to 38,795 acres and the area of land cultivated by the households in this region comes to 38,583 acres. Thus there



is scarcely any difference between the area of the owned land and the area of the cultivated land. The per capita owned land is 1.17 acres and the per capita cultivated land is also 1.17 acres. The comparative position in this respect is given in the following Statement XXV.

*Statement XXV*

Per capita land

(In acres)

Region	Per capita owned land	Per capita cultivated land
Rourkela	1.17	1.17
Sundergarh	1.21	1.27
Inland region	0.95	0.97
Coastal region	0.54	0.62
Orissa	0.76	0.82

18. The above information brings out two significant conclusions. The sample survey in the rural areas of Orissa showed that in Orissa as a whole, in the inland and the coastal regions and in the district of Sundergarh, the extent of cultivated land is larger than the extent of the land owned. This means that there is quite a number of non-cultivating owners living in the urban areas or outside the State. All the lands cultivated by the farmers are not their own. This absentee ownership seems to exist broadly throughout the State and to a greater extent in the coastal area. In other parts of the district of Sundergarh some land cultivated by farmers belongs to owners living in towns or perhaps in other districts of the State. But in the Rourkela region, the state of affairs is different. The total area of land cultivated is almost the same as the total area owned by the families in Rourkela. Thus absentee ownership is non-existent and there is no outsider holding land in this region. The second conclusion that emerges is that the area of cultivated land is less only by 212 acres than the area of land owned by the families at Rourkela. This is an insignificant difference. Nevertheless this indicates that during the year of survey the area of current fallow was only about 200 acres in all these 98 villages, which is indeed very small.

19. In the Rourkela region, there are 4,864 land-owning families and of them 4,644 are cultivating families. The number of cultivating families is thus less than the number of land-owning families in this region. Therefore the average size of cultivated holdings is necessarily larger than the average size of the holdings owned. In undeveloped regions, a characteristic feature is an abnormal rush for cultivation of land. The fact that cultivating families are less than the land-owning families in Rourkela may perhaps suggest that this usual feature of underdeveloped agrarian economy does not operate in very significant manner in this region. The really important explanation for this feature is provided in the statement given below. This statement shows the percentage of households with holdings of less than one acre in size which has leased out its land to other farmers.

*Statement—XXVI*

Percentage of non-cultivating owners with  
holdings less than one acre in size

Region	Percentage of non-cultivating owners
Rourkela	48·8
Sundergarh	4·5
Inland region	6·3
Coastal region	13·3
Orissa	11·4

20. It is clear from this statement that in Orissa, among the families owning less than one acre of land, as many as 89 out of 100 cultivate their small and extremely uneconomic bits of land. This general situation is broadly true in respect of most of the different parts of the State. But Rourkela is very remarkably different. In this region 48·8 per cent of the families owning less than one acre of land lease out their lands to comparatively substantial farmers. It is this factor which is mainly responsible for the cultivating families being less in number than the land-owning families. Small bits of land of less than one acre in size

are not considered quite worth while for cultivation. This might be, to some extent, due to the alternative employment avenues created by the preliminary work in the steel plant in the year of survey. There are no data available to show what the situation was a few years back. But the conclusion is clear and significantly different from other areas in the State, that about half the families with small bits of land do not cultivate their lands and this is a healthy feature of the agricultural economy.

21. The prevailing size of the unit of cultivation furnishes a general picture with regard to the efficiency of cultivation. It is in respect of size of the cultivating unit that the complementarity of the other factors of production can be assessed. The statement XXVII gives below the average size of the cultivated holdings.

*Statement—XXVII*

Average size of cultivated holding

Region	Number of cultivating families	Total area of cultivated land (Acres)	Average size of cultivated holding (Acres)
Rourkela	4644	38583·0	8·3
Sundergarh			
(Sample survey)	2762	22341·5	8·1
Coastal region			
(Sample survey)	31178	126390·0	4·1
Inland region			
(Sample survey)	37996	243593·0	6·4
Orissa			
(Sample survey)	69174	369983·0	5·4

22. The average size of the cultivated holdings for Orissa as a whole is 5·4 acres. In keeping with the general problem of

man-land ratio, the unit is smaller in the coastal regions where it is 4.1 acres, compared with the inland regions where it is about 50 per cent more. It has already been shown that the density of population in the Sundergarh district is the lowest in Orissa. Consistent with this situation the average unit of cultivated holdings in this district is 8.1 acres. The Rourkela region is somewhat in a better situation than the district of Sundergarh taken as a whole. In this region, the average unit comes to 8.3 acres. Two features are to be noticed in respect of the size of holdings in the Rourkela region. In the first place, the unit of the cultivated holding is higher in this area than in the district of Sundergarh where it is higher than most parts of the State. Secondly in the Rourkela region, the average size of the unit of cultivation is higher than the size of the holdings per owning family. The second feature is particularly important because the unit of cultivation is more effective from point of view of farming efficiency than what the unit of ownership would suggest.

23. The broad average size does not however bring out clearly the effective size of cultivation. Statement XXVIII given below shows the distribution of cultivated holdings under the various size-groups.

*Statement—XXVIII*

Distribution of cultivation units and  
cultivated area by size-groups

Size of holding (acres)	Number of cultivating families	Percentage of cultivating families	Area of cultivated land (acres)	Percentage of cultivated area
Below 5	1828	39.4	5442.0	14.0
5-9	1585	34.1	11295.5	29.3
10-14	663	14.3	8081.5	21.0
15-19	285	6.1	4921.5	12.8
20-24	124	2.7	2789.0	7.2
25 and above	159	3.4	6053.5	15.7
<b>Total</b>	<b>4644</b>	<b>100.0</b>	<b>38583.0</b>	<b>100.0</b>

24. It may be observed that in this statement the number of cultivating families is the same thing as the number of the units of cultivation, since the land cultivated by a household has been taken as a unit of cultivation. The statement shows that out of 4,644 cultivating families, as many as 1828 have cultivated holdings below 5 acres in size. Of the total number of cultivating households, 39·4 per cent, i.e. the largest single proportion comes under this group. But although the number of families under this category is large, the total cultivated area which is cultivated by these families constitutes only 14 per cent of the total area under cultivation in this region. The 98 villages surveyed had an area of 38,583 acres under cultivation during the year of survey. The largest proportion of the cultivated area, i.e. 29·3 per cent, comes under the size-group 5 to 9 acres and 34·1 per cent of the families cultivated these holdings. It should be observed from this statement that a little more than half the total cultivated area comes under the size-group 5 to 14 acres. The significance of this finding can be judged in with the comparative situation in the district of Sundergarh and for the whole of Orissa given in the statement below:—

*Statement—XXIX*

Cultivated area under different size-groups

Region	Size of holdings	Percentage of total holdings	Percentage of total cultivated area
Rourkela	0-5	39·4	14·0
	5-14	48·4	50·3
Sundergarh	0-5	45·9	16·4
	5-14	41·4	44·1
Orissa	0-5	66·4	29·5
	5-14	27·7	41·8

25. A glance at this statement would show that compared to the district of Sundergarh and Orissa as a whole, the proportion of cultivated holdings in the smallest size group, i.e. below 5 acres, in Rourkela is considerably less. Cultivated holdings of the size between 5 to 14 acres form a larger proportion in this region. It is a well-known fact that, generally speaking, most of the cultivated units in our country are uneconomic holdings. The problem of an economic holding has been under serious discussion for many years. But it has not been possible to find a definite meaning of this concept, let alone a quantitative measure. This is, of course, evident that an economic holding must be different according to the character of the land, the technique of cultivation, the standard of living, need for adequate employment for the family and the organization of agriculture. It is difficult to bring in all these consideration in determining the size of an economic holding. Views in respect of these different criteria have also been very different. At any rate, a quantitative prescription has not, so far, been possible. Nevertheless, the statements, in broad terms, have made it clear that the units of cultivation in the Rourkela region are less uneconomic than in the district of Sundergarh or for the State of Orissa as a whole. It is particularly note-worthy that even though compared to the district of Sundergarh as a whole, the man-land ratio in Rourkela is unfavourable, from the point of view of the size of agricultural holdings, this region is in a position of comparative advantage.

### *Distribution of ownership*

26. We have already analysed the size of holdings in the ownership of the households in the Rourkela region. It is necessary now to show how this ownership is distributed among the various classes of the population in this area. Statement XXX gives below the ownership of land among the main classes of the community.

*Statement—XXX*

## Ownership of land—Caste-wise

Caste	Owned land (In acres)	Number of owners	Rourkela	
			Average area of land per owning family -	Average area for land- owning family in Sunder- garh
Non-scheduled				
Hindu	11238.5	1337	8.4	9.4
Scheduled Caste	3830.0	500	7.7	4.8
Scheduled Tribes	16979.5	2179	7.8	7.4
Other Religion	6744.0	848	8.0	8.1
Total	38795.0	4864	8.0	7.9

27. The average area of land per owning household in the Rourkela region is 8 acres. Out of the 4,864 land-owning families, 1337 belong to the non-scheduled Hindu classes. The families belonging to these classes own 11,238.5 acres and thus have 8.4 acres per owning family. This is larger than the average among the land-owning families belonging to the scheduled castes, scheduled tribes or other religions. But the difference is not very significant. It has already been pointed out that most of those who come under the group 'other religion' belong in fact to the tribal classes. The scheduled castes have 7.7 acres per family, the tribes, 7.8 and the families belonging to the 'other religions,' 8 acres of land per owning family. It is commonly presumed that tribal people own less of cultivated land than the non-scheduled Hindus. This presumption is disproved by the above statement. There is a slight difference of the average size of holding per family between the tribal households and the non-scheduled households. But the difference is too small to make any assertion that caste or class has much to do with the ownership of land in the Rourkela area. The picture for the district of

Sundergarh as a whole is, however, some-what different. There the tribal households have 7.4 acres per family and the non-scheduled Hindus, 9.4. Compared to the Rourkela region, in the district of Sundergarh the non-scheduled Hindus have an economic advantage from the point of view of land ownership. So far as the scheduled classes are concerned the ownership of land per household is much smaller i.e. only 48.8 acres in the district of Sundergarh. But in the Rourkela region the situation is different. Here the scheduled class and the scheduled tribes are on the same footing from the point of view of ownership of land. The general picture emerges that in the Rourkela region the ownership of land per owning family is balanced and well distributed among the various classes of the community.

28. Of particular significance is the correlation of ownership of land with the different occupations followed by the households. The Statement XXXI below gives the distribution of land ownership among the various occupation groups.

*Statement XXXI*

Ownership of land—Occupation-wise

Occupations	Area of owned land (acres)	Number of owning families	Average size of owned land per owning families (acres)
Agriculture	36942.5	4277	8.6
Agricultural Labour	442.0	142	3.1
Other labour	557.5	191	2.9
Trade	58.5	31	1.9
Transport	226.5	63	3.6
Production other than cultivation	223.5	99	2.3
Service and professions	270.5	51	5.3
Not given	74.0	10	7.4
Total	38795.0	4864	8.3



29. Of the 4864 households, there are 4277 agricultural families. Of the 38,795 acres of owned land, 36,942.5 acres are owned by the agricultural households. The average size of owned area per family among the agricultural households is 8.6 acres. Among the various other occupations, the size of holding varies from 1.9 acres to 5.3 acres. The occupations classed under the category 'not given' need not be taken into consideration because the number of families under such category is very small. Among the various non-agricultural occupations, the largest size of holdings is owned by the families having service and profession as their occupation. Such families, earning incomes in their respective occupations, have found surplus income for investment on land. Most of the families with non-agricultural occupations as their principal means of livelihood have some landed property as is the usual case in any part of the rural economy in Orissa. It may be observed from the statement that among those who follow trade as their principal occupation, the ownership of land is the least per household. It has been suggested earlier that perhaps trade requires more or less whole-time attention of the families and ownership of land by such families has not been considered very much worth while.

30. It would perhaps be necessary to draw the picture in greater details showing the size of holdings owned by different families with various occupations. Statement XXXII furnishes below these details in respect of the broad situation given in the previous statement.

31. Among the agricultural families, there are only six out of a thousand who are landless. Among the other families adopting various non-agricultural occupations landless households are considerable in number. Among those who have got lands of less than one acre in size the percentage is exceedingly small among the agricultural classes and quite significant among most of the classes with the various other occupations. Traders as a class have the largest proportion of landless families and very few with any considerable landed possession. In fact, about 90 per cent

# STATEMENT—XXXII

## PERCENTAGE OF FAMILIES WITH DIFFERENT SIZES OF OWNED LAND (OCCUPATION-WISE.)

Occupation.	Land- less fami- lies,	1 (acre)	2 (acres)	3 (acres)	4 (acres)	5 (acres)	6 (ac-cs)	7 (acres)	8 (acres)	9 (acres)	10-14 (acres)	15-19 (acres)	20-24. (acres)	25 and over	TOTAL.	
Agriculture	0.6	1.7	5.3	8.8	10.6	9.8	10.2	7.8	7.3	5.5	4.6	15.2	6.3	2.6	3.7	100-0
Agricultural- labour ..	42.8	18.6	13.7	7.7	5.2	2.4	2.4	0.8	0.4	1.6	0.4	2.4	0.8	0.8	...	100-0
Other Labour	39.4	26.0	6.0	9.2	5.2	3.5	3.2	2.9	1.0	0.6	0.3	1.9	0.3	0.3	0.3	100-0
Trade	67.8	21.9	4.2	2.1	1.0	1.0	...	...	...	...	...	1.0	1.0	...	...	100-0
Transport	43.3	5.4	17.1	11.7	4.5	7.2	3.6	0.9	...	1.8	0.9	1.8	1.8	...	...	100-0
Industry	49.2	24.6	7.3	7.7	1.5	2.6	1.5	2.6	1.0	...	1.0	1.0	...	...	...	100-0
Service and Profession-	37.2	16.1	8.6	7.4	7.4	8.6	1.2	...	1.2	1.2	2.5	4.9	...	1.2	2.5	100-0
Not given	33.3	6.7	6.7	...	6.7	...	13.1	...	6.7	6.7	6.7	6.7	6.7	...	...	100-0
TOTAL	9.3	5.3	6.1	8.6	9.3	8.6	8.9	6.6	6.0	4.6	3.8	12.5	5.2	2.2	3.0	100-0

of them have either no land or land of less than one acre in size. This confirms the earlier finding that trade and agriculture do not go together in this region. When we look into the holdings of large sizes, it can be seen that the overwhelming advantage is in favour of the agricultural classes. More than 21.5 per cent of the agricultural families have holdings between 10 to 19 acres in size. In respect of other occupations, the percentage of families with any such holdings is much less than even two percent. (The category 'not given' is not taken into account).

32. As an agricultural economy, Rourkela enjoys certain distinct advantages. From the point of view of the size of holdings and distribution of the holdings among the various occupation-groups, the agriculturists are distinctly in a position of advantage. The encroachment of non-agriculturists into the ownership of land has been insignificant in this area. Further, the size of holdings indicates a comparatively favourable situation. Broadly speaking, therefore, the agricultural economy of the Rourkela region is, in these respects, in a superior position compared with the district of Sundergarh or the State of Orissa as a whole.

33. After analysing the size of holdings and distribution of ownership among the various classes and the different occupations, it may be of interest to draw an overall picture of the extent of inequality in ownership of land in this region. The Statement XXXIII given below shows a cumulative percentage of families and corresponding percentage of land held by them. The land owned by all the families in Rourkela region was arranged in various size-groups with unit intervals. For each size-group, the number of families in that group and the estimated land owned by that group were noted. The families and lands in each group were then expressed as percentages to the total number of families and the total area of land respectively and then cumulative totals of these percentages have been calculated. The statement below has been prepared by this process.

*Statement XXXIII*

Inequalities in the distribution of land  
among the families

Cumulative percentages of families	Cumulative percentages of land held
10	32
20	49
30	61
40	71
50	79
60	87
70	92
80	96
90	98
100	100

(Drawn on the basis of Lorenz Curve).

34. The cumulative percentages given in the above statement shows at a glance the extent of inequality or otherwise of ownership of land in the Rourkela region. Ten percent of the families in this region own 32 per cent of the total agricultural land. In the district of Sundergarh, the first decile of families holds 35.7 per cent and in Orissa 43 per cent of the agricultural area. Thus the inequality in the distribution of ownership of land is less in Rourkela than either in the district of Sundergarh or in the State of Orissa as a whole. Two deciles of the families at Rourkela i.e. 20 per cent of the households own about half the total agricultural land and 50 per cent of the families have 4|5ths of the total agricultural land in this area. There is, of course, a certain degree of inequality in the ownership of land, but compared to other parts of the State, the inequality is much less.

*Leasing of Land*

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35. We have discussed the size of land owned, the size of the unit of cultivation and distribution of ownership in the Rourkela

region. It is necessary to know the extent of idle ownership and of land cultivated under lease. The Statement XXXIV furnishes the percentage of families leasing out land for cultivation by others and the percentage of the total agricultural land so leased out.

*Statement XXXIV*  
Renting out of Land—(Caste-wise)

Caste,	Total number of families.	Number of families renting out land.	Area of total owned land in acres	Area of land rented out (acres).	Percentage of families renting out	Percentage of land rented out
Non-scheduled						
Hindus	1337	80	11238.5	475.0	5.6	4.2
Scheduled Castes	500	18	3830.0	120.0	3.6	3.1
Scheduled Tribes	2179	47	16979.5	218.5	2.2	1.3
Other Religions	848	21	6744.0	171.5	2.5	2.5
Total	4864	166	38795.0	985.0	3.4	2.5

36. Out of the 4864 land-owning families in the Rourkela region, 166 families rented out their lands for purposes of cultivation by others. This forms only 3.4 per cent of the total land-owning families in this region. The total area of land leased out comes to only 985 acres constituting only 2.5 per cent of the total land owned by the different families in this area. It is very clear from this statement that leasing of land to others for cultivation is a very unusual practice here. The caste-wise distribution brings out that the percentage of families which leases out land is slightly higher among the non-scheduled Hindus. All the same, this forms only 5.6 per cent of the land-owning families under this caste-group. Among the scheduled tribes, the extent of land leased out forms only 1.3 per cent, and among the scheduled classes 3.1 per cent. All this is a clear evidence that although there is some difference between one class and another in respect of leasing of lands, the difference is exceedingly meagre and the broad picture emerges that leasing out land for cultivation by others is an unusual feature of this area.

37. This conclusion will be re-inforced if we consider the percentage of land leased-in by cultivating families. The statement No. XXXV furnishes the information in this respect.

*Statement—XXXV*

Leasing in of Land by Families (Caste-wise)

Caste.	Total No. of Cultivating families.	No. of families leasing in.	Total cultivated area (acres)	Area of land leased in	Percentages of families leasing in.	Percentages of land leased in
Non-scheduled						
Hindus	1235	108	11116.5	406.0	8.7	3.7
Scheduled Castes	463	27	3762.5	106.5	5.8	2.8
Scheduled Tribes	2119	92	16894.5	231.0	4.3	1.4
Other Religions	827	84	6809.5	258.0	10.1	3.8
Total	4644	311	38583.0	1001.5	6.7	2.6

38. Out of the total number of 4644 cultivating families, 311 took some land on lease for cultivation. The total leased-in area constitutes only 2.6 per cent of the total area under cultivation and only 6.7 per cent of the total number of agricultural families have taken these lands on lease to cultivate. Whereas the total area under cultivation is more than 38,000 acres the area taken in lease for cultivation is only about 1000 acres. In this respect, the non-scheduled Hindu families have taken some-what larger percentage of area on lease for cultivation, compared to the scheduled castes and scheduled tribes. But this difference is not meaningful, since the total leased-in area is exceedingly small. The aggregate picture presented in this statement clearly demonstrates that taking of land on lease for cultivation is not a feature of any significance so far as the agrarian structure in this region is concerned.

39. The fore-going statements clearly show that the problem of tenancy, which has been a crucial issue in land reforms with conflicts and controversies throughout India, does not at the

moment exist in the Rourkela region to any significant extent. Here the cultivators are, almost all, peasant proprietors cultivating the lands which they themselves own. This is a situation of great advantage for the functioning of an agricultural economy. With the impact of industrialisation and the availability of lucrative employments in the steel plant, absentee ownership of land is likely to grow and disrupt the existing agrarian structure. The setting up of the steel plant and various other industrial units in the area should provide impetus for improving the technique of cultivation and agricultural organisation and not impair the healthy features of the existing economy. It would be necessary to guard against idle ownership of land developing on account of industrial growth and destroying the agrarian advantages which the region now enjoys.

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## CHAPTER V

### INCOME AND EMPLOYMENT

#### *Income Estimate*

An estimate of income with its constituents and distribution was one of the principal objectives of this survey. This will be evident from the schedule prepared for the purpose of enquiry. Analyses of population, occupations and ownership and cultivation of land are indeed various aspects of the scheme of income study. The economic condition of any community has to be presented in terms of the income structure. This will show the level of opulence or poverty and the standard of living of the community. In the case of Rourkela survey, there is a further need for presenting this income structure. The large scale heavy industries will necessarily re-act on the existing agricultural economy in and around the area. These industries will open out new avenues and patterns of employment and will greatly change the income and standard of living of the people. It is, therefore, of great interest to study the income structure on the eve of this industrial impact. This will serve as a bench-mark to understand the dimensions of economic change. Accordingly an analysis of income, as obtained in the survey, is presented below.

2. An attempt at estimating incomes has to encounter various difficulties. This survey was conducted through the method of interviews with the heads of house-holds. The extent of accuracy of the data, under such method, depends upon the character of the respondents. In many cases respondents have a tendency to understate their incomes. This is particularly true among the higher-income groups. In some cases, there is the opposite tendency for somewhat over-stating the income. This may be done in respect of some professions for showing professional attainments. In the Rourkela region these two factors did not play any significant role. Rourkela has an agricultural economy with a large primitive population. It may be presumed



that in this region with such a socio-economic structure, economic sophistication is not of any considerable magnitude. But there is another factor to be taken note of in presenting the income structure. Most people do not maintain any accounts. They have to respond to the questionnaire depending upon their memory and approximate estimates. As such, the figures cannot be expected to be accurate. While conducting the survey, we were conscious of all these limitations. Care was taken at the time of investigation to compute the incomes of families from their main and different subsidiary occupations separately. During the course of verification, efforts were made to arrive at the incomes as accurately as possible. Nevertheless, the estimates of income presented in this report could be regarded as approximations.

### *Aggregate Income*

3. It is the usual practice to present aggregate income and per capita income to show the economic condition of any community. We have already shown that family is the relevant economic unit, particularly in an agricultural economy. It is necessary, therefore, to show the income not only per head of the population, but per house-hold which is the economic unit. Statement XXXVI below shows the annual income during the year of the survey and the average income per family and per head of the population.

### *Statement—XXXVI*

#### *Annual Income*

Number of families	5,363
Number of persons	33,041
Total Income (In rupees)	4,752,022
Income per family (In rupees)	886.08
Income per person (In rupees)	143.81

4. The total annual income of the 98 villages surveyed comes in round numbers to Rs. 4,750,000. The per capita income is Rs. 144|. It should be noticed that the income in the Rourkela region per head of the population in the survey year was about

one-half of the per capita income for the whole of India. The figures are not however strictly comparable. The all-India average is composed of income from agriculture, mining and manufacturing, commerce, transport and communication and other services. This per capita figure of national income covers the entire population, both rural and urban, whereas for the region of Rourkela the income is only from the rural sector and basically from agricultural pursuits. Even so, an average annual income of Rs. 144/- per head of the population i.e. Rs. 12/- a month shows that the standard of living in this region is distinctly of a low level.

5. The picture can be presented in a different manner by considering the annual average income per household. It has been pointed out in Chapter II that the average size of families in Rourkela is 6.16. For a family of such a size, the annual average income comes to Rs. 886/-. This includes incomes from all sources—from the main and the subsidiary occupations. With about Rs. 74/- a month, an average family of somewhat more than six members, in size, is not expected to lead a standard of life of any reasonable level. It is around this structure of low incomes and low standard of living that the industrial economy is being planted and it will be of great interest to watch and study the changes that would come about with the impact of industrialisation.

### *Occupation and Income*

6. Although agriculture is the principal means of livelihood in this region, there are various other kinds of subsidiary occupations pursued by the families. A few of the families have also non-agricultural occupations as the principal means of livelihood. All this has been analysed in Chapter III. It is necessary at this stage to show the relative importance of these occupations from the point of view of income. Statement XXXVII below shows the occupation-wise distribution of income per family and per head of the population.

*Statement—XXXVII*

Income per family and per capita  
(Occupation-wise)

Occupation.	Families.	No. of Per- sons.	Total Income in Rupees.	Income per Family.	Income per person.
1. Agriculture	4032	27160	3869384	959.67	142.47
2. Agricultural Labour	248	1446	169917	685.16	117.50
3. Non-Agricul- tural Labour	315	1732	239907	761.61	138.52
4. Trade	96	480	134999	1406.23	281.23
5. Transport	111	666	90998	819.75	136.64
6. Industries	195	1058	147084	754.28	139.02
7. Service and Profession	81	421	95865	1183.52	227.70
8. Not given	15	78	3868	257.86	49.59
Total	5363	33041	4752022	886.08	143.81

7. It will be seen from the statement that families with trade and service and professions as their main source of livelihood form the highest income-groups in the region... The per capita income in trading families comes to Rs. 281|- and in families pursuing service and profession as their main occupation, to Rs. 228|-. These incomes are substantially higher than the per capita income in families which have agriculture as principal occupation. This is only as is usually expected. It should be noticed that families pursuing these two occupations are only 177 in number out of a total number of 5363 families in Rourkela region, forming only 3 per cent of the total number of households.

8. Next to the families with trade and service and profession as their main occupations, come agricultural families in the

gradation of income. In such families, the per capita income comes to Rs. 142½ a year. It should be noticed that non-agricultural labour, transport and industries are almost of the same level in the per capita income structure as agriculture. The difference among these is too small to be of any practical significance. It has already been pointed out that transport in the Rourkela region is basically an extension of agricultural occupation and industries in this area are mainly subsidiary to agriculture. The non-agricultural labour comes up to the same level as agriculture mainly because certain industrial occupations and employments in the preliminary operations in the Rourkela were available. Lowest in the scale comes agricultural labour. In our present day economy almost everywhere, agricultural labour belongs to the low income groups. This is true of Rourkela region as well. It should be noticed that the per capita income in families with agriculture as the main occupation is almost the same as the average per capita income for the Rourkela region. Families with trade and service and profession have higher incomes and agricultural labour families lower incomes. All other families are of the average level.

9. The average annual income per agricultural labour family in Rourkela was Rs. 685½. The agricultural labour enquiry for India, conducted under the Ministry of labour in 1951, showed that the average annual income per family of agricultural labour in the State of Orissa as a whole was Rs. 340½. This enquiry was conducted five years before our survey. During this period prices and wages underwent changes. With the increased demand for non-agricultural labour arising out of the preliminary operations at the steel plant, some partly-employed and unemployed persons belonging to the labouring families obtained employment and, therefore, family incomes increased. At the same time, this increased demand for labour must also have pushed up the agricultural wages. Besides, the figure given in the agricultural labour enquiry report was an average for the entire State of Orissa. We have already shown that the percentage of agricultural labour to the total agricultural population in

the Rourkela region was considerably less than in most other parts of the State, and accordingly their wages are expected to be higher on that account. On account of these factors, the average annual income per agricultural family in the Rourkela region as disclosed in our survey was considerably larger than the average for the whole of Orissa computed in the Agricultural Labour Enquiry Report.

10. The above statement brings out the amounts of total income derived from the different sources. It is useful to have a picture of their relative importance. The statement XXXVIII given below shows the proportions of the total income derived by the families pursuing different categories of main occupations.

*Statement—XXXVIII*

Relative importance of different occupations

Agriculture	81.4 per cent
Non-agricultural labour	5.1 "
Agricultural labour	3.6 "
Production other than cultivation	3.1
Trade	2.8 "
Service and professions	2.0 "
Transport	1.9 "
Not given	0.1 "
<hr/>	
Total	100.0

11. This statement shows that 81.4 per cent of the total income in the 98 villages in and around Rourkela are derived by the families pursuing agriculture as their main occupation. All the other families taken together get only 18.6 per cent. This clearly brings out the over-whelming importance of agriculture in the total income of the community at Rourkela. We have shown that trade and service and profession yield much larger incomes than agriculture. But their proportion is so small that the two taken together produce only 4.8 per cent of the aggregate

income in this region. Considered in the economy as a whole, all the various occupations other than agriculture occupy in the aggregate income structure a position of minor importance.

12. It would, perhaps, be interesting to indicate the position of the various classes of the community in this region so far as the sharing of the income is concerned. It has been shown in Chapter III that in trade and service and professions—the two most lucrative of the occupations in this region—the non-scheduled Hindu families have a much larger share than the other classes. In trade, the share of the scheduled tribes and of the scheduled castes is exceedingly small. In service and professions, 3·4 per cent of the non-scheduled Hindu families find occupations and 2 per cent, from among the scheduled castes. So far as the tribal families are concerned, only 4 out of a thousand families are in services and professions. Thus it is clear that the two most lucrative occupations are largely in the hands of the non-scheduled Hindus. Scheduled caste families have a small share and the share of the tribal families is negligible. In the income scale, therefore, on this account, the tribal population is at a lower level than either the non-scheduled Hindus or the scheduled castes. Agricultural labour occupies the lowest place in the income classification. It has been shown in Chapter III that the percentage of families having agricultural labour as their main occupation is almost the same among all the different classes of the community. In this respect, therefore, no particular caste or class is at any comparative disadvantage in the Rourkela region so far as the sharing of income is concerned. In all other occupations, the level of average income per family is more or less the same. Therefore, even though the percentage of families of the different classes and castes pursuing these various occupations is different, from the point of view of income this is of no significance. The only fact that emerges from this analysis is that the much larger share in trade and professions is enjoyed by the non-scheduled Hindus and the share available to the tribal population is negligible. But since the income from these two sources forms only 4·8 per cent of the aggregate income, the

inequality on this account with regard to the economic importance of the various classes is exceedingly small. The broad picture emerges that from the point of view of income there is not much difference among the different classes of the community in the Rourkela region.

### *Distribution of Income*

13. Having presented the over-all picture in respect of income in the Rourkela region, it is necessary to show the distribution of income among the families of different income-groups. Statement XXXIX given below shows the distribution of income among the families of different income-groups and the percentage of total income enjoyed by such families.

#### *Statement—XXXIX*

#### Families and incomes in different Income groups

Income groups in Rupees.	No. of families.	Percentage of total	Income in Rupees.	Percentage of total Income.
1-100	42	0·8	3265	0·1
101-200	191	3·6	31379	0·7
201-300	360	6·7	94439	2·0
301-400	566	10·6	201329	4·2
401-500	584	10·9	266948	5·6
501-600	577	10·8	320246	6·7
601-700	459	8·6	299747	6·3
701-800	413	7·7	310442	6·5
801-900	349	6·5	298351	6·3
901-1000	287	5·3	274613	5·8
1001-1100	240	4·5	253409	5·3
1101-1200	182	3·4	209780	4·4
1201-1300	163	3·0	204183	4·3
1301-1400	134	2·5	181478	3·8
1401-1500	93	1·7	135093	2·8
1501-1600	91	1·7	141194	3·0
1601-1700	77	1·4	127797	2·7

Income groups in Rupees.	No. of families.	Pe. centage of total.	Income in Rupees.	Percentage of total Income.
1701-1800	59	1.1	103834	2.2
1801-1900	48	0.9	88906	1.9
1901-2000	52	0.9	101214	2.1
2001-5000	291	5.4	824009	17.4
5000 and above	36	0.7	280366	5.9
Not given	69	1.3	—	
Total	5363	100	4,752,022	100

14. Families with less than Rs. 100|- as annual income are destitute of the means of subsistence. Such families are 42 in number, constituting 8 in a thousand in this region. Those with incomes between 101 and 300 form a little more than 10 per cent of the total families, and they command less than 3 per cent of the total income. These families are also on the verge of subsistence. Substantial numbers of house-holds come under the income-groups 301 to 600. They constitute a little less than one-third of the total households in this region; but they command only one-sixth of the total income of these villages. This presents a picture of inequality in the distribution of income. In the subsequent higher income groups, the percentage of families goes on diminishing. A noticeable feature is that families enjoying incomes between 2001 to 5000 are fairly large, considering the distribution of families under the various income-groups. As much as 5.4 per cent of the total number of families come under this high-income group, commanding more than 17 per cent of the aggregate income in this region. In an agricultural economy with ownership of land rather evenly distributed, this income structure shows a considerable degree of inequality in distribution.

15. This picture of inequality in the distribution of income can be presented in a simplified form showing the cumulative percentage of income enjoyed by the families arranged in deciles. The Statement XXXX brings out this picture.



*Statement—XXXX*

Inequality in the distribution of Income	
Cumulative percentage of families	Cumulative percentage of Income
10	2
20	6
30	11
40	16
50	23
60	31
70	41
80	53
90	79
100	100

16. The statement shows that 10 per cent of the families belonging to the highest income-group enjoy 21 per cent of the total income in this region. This may not indicate any great concentration of income, but when we look at the fact that 20 per cent of the families in the lowest income-groups in this region are able to command only 8 per cent of the total income and half the total number of families is able to secure only 23 per cent of the aggregate income, the extent of inequality becomes visible. There is quite a large number of families in this area belonging to the exceedingly low-income groups. Because this is a region of agricultural economy and because there is not much concentration in the ownership of land, families with very high incomes are rather rare. Quite a substantial number of families comes under the relatively substantial income-groups. Acute concentration associated with the urban and industrial economy and also with medieval structure of landlordism, does not exist in the Rourkela region. But within the rural and agricultural structure, there is a good deal of poverty in this area which is clearly shown by the large number of families belonging to very low-income groups. The inequality of distribution is thus of a different character in this region.

*Labour Force*

17. Having estimated the income and analysed its components, it is now necessary to consider the ancillary question of employment. Who earns this income? What is the proportion of the population, that is engaged in productive activities? What is the volume of total labour force in this region? Is this entire labour force fully and gainfully utilised? If not, what is the extent of unutilised human material? How much of man-power is available for employment elsewhere? These are the issues to a study of which the rest of the chapter is devoted.

18. At the outset, it is necessary to define what is meant by labour force or working population. The labour force is constituted of that portion of the total population which is fit to be gainfully employed. Persons below 13 years or above 65 years in age are not included in this working population. According to the Factory Act of 1948, no child who has not completed his fourteenth year shall be required or allowed to work in any factory. There is no such legal prescription for agricultural labour. Poverty and lack of educational or training opportunities make children below 15 years in age work in the fields in the rural areas. Children of tender age are sometimes put to work. But it may be assumed that children below the age of 13 years, generally speaking, are not employed except occasionally and in rare cases. Similarly, elderly persons above 65 years in age are seldom able to take up any gainful occupation. At any rate their number is exceedingly small. From the scope of the labour force, children below 13 years in age and elderly persons above 65 years in age are thus excluded. The labour force consists of all persons between the ages 13 and 65.

19. Based upon this definition, the labour force in the Rourkela region is given in the statement below:—

*Statement—XXXXI**Labour Force*

	Number	Percentage of total population
Persons below 13 years in age	13,133	39·7
Persons above 65 years in age	481	1·5
Labour force (i.e. 13 to 65)	19,353	58·6
Not given	74	0·2
Total population	33,041	100·

Thus out of a total population of 33,041 in Rourkela, the working population or labour force consisting of persons between the ages of 13 and 65 are 19,353 in number, constituting 58·6 per cent of the entire population. The balance of the population is either children or elderly persons beyond the working age. The percentage of children in this region is rather high and the elderly and incapacitated section is exceedingly small. It is in respect of this working population of over 19,000 that the question of employment is to be considered.

*Earners and Dependents*

20. By definition, all persons below the age of 13 and above the age of 65 are necessarily considered as dependants since they do not belong to the labour force. These two sections constitute 41·2 per cent of the total population. The large children population necessarily indicates a large burden on the labour force and to that extent the standard of living is depressed. But the most important thing to be discussed is about the extent of employment among the persons belonging to the labour force. The following statement No. XXXXII shows the comparative position of earners and dependants in Rourkela, Sundergarh and Orissa.

## STATEMENT XXXXII.

Working population, Active-Labour force  
and Non-earning Dependents.

Region.	Population in the age-group 13-65.	Adult Earners or the active labour Force.	Non-earning dependants.			Total non- earning dependants.	Not given.	Total population.
			Below 13 years.	Between 13-65.	66 and above.			
Orissa.	62.3	47.2	36.0	15.1	1.6	52.7	.1	100.0
Sundergarh	59.9	52.9	39.0	7.0	1.0	47.0	.1	100.0
Rourkela.	58.6	41.6	39.7	17.0	1.5	58.2	.2	100.0

21. It is usual to distinguish between earners, earning dependents and non-earning dependents. But the distinction between earners and earning dependents is difficult to draw in an agricultural community. In a family, 4 or 5 persons may be working on field and each one of them may be under-employed. In such a case it would be difficult to say how many of them are earners and how many, earning dependents. Accordingly, this distinction has not been attempted in the statement given above. It should be observed that compared to Orissa as a whole, the Rourkela region has a larger percentage of population belonging to the age-group of below 13 years. With regard to old men and women, the position in Rourkela is similar to what obtains for the whole of Orissa. But the most important study with regard to the problem of unemployment is concerned with the population belonging to the age-group of 13 to 65. The active labour force given in the statement shows how much of the working population is actually gainfully employed. It should be observed that out of 59 persons in the working age, 42 are in employment and 17 are unemployed. This is the vital factor to be taken into account. As much as 29 per cent of the labour force available in the Rourkela region do

not find any gainful employment. The situation in Rourkela in this respect is very much worse than what it is for the district of Sundergarh as a whole, though compared with the average for Orissa the difference is not significant. Including persons below and above the working age, the total number of dependents in Rourkela forms 58.2 per cent of the population. The employment position for the district of Sundergarh as a whole is very much better where only 47 per cent of the population are dependent. For the State of Orissa as a whole the extent of dependency is also less than what it is at Rourkela.

22. The comparative position with regard to dependent population is presented in a simplified manner in the Statement XXXXIII given below.

*Statement—XXXXIII*

Number of dependents per 1000 earners

Region	Age-groups Total number of dependents.			
	Below 3 years	13-65	66 and above.	
Orissa	76	32	3	111
Sundergarh	74	13	20	107
Rourkela	95	41	4	140

23. In the Rourkela region, 100 earners have to support as many as 140 dependents. This is very much larger than in the district of Sundergarh, or for the State of Orissa as a whole, where the respective figures are 107 and 111. Rourkela has a larger children population and also a larger percentage of persons in the working-age group, without gainful occupation. Therefore, the extent of dependency is much larger. The standard of living is, therefore, necessarily of a lower level. This is particularly so when we put the extent of dependency in the context of the economy which is largely agricultural and primitive in type.

24. The standard of living in the Rourkela region can perhaps be better appreciated if we know the number of persons who are earning members in a family. It has already been shown in

Chapter II that the average size of a family is much larger in Rourkela than for Orissa as a whole. There are 5363 households in the Rourkela region and an average household consists of 6.16 members. For such a family, the number of earners is 2.6 and the rest are all dependents. In professional classes, in the middle class families and in higher income groups, one or two earning members may support a family of more than six. But in such cases the income of the single earner is considerable and it may not be considered worthwhile for other members of the family to pursue any gainful employment. The standard of living in such families is of a reasonably high level. But the consideration is very different in respect of households where the economy is agricultural and primitive in character. In such families excepting children of a very tender age and old men absolutely incapacitated for any work, all others have to take up some occupation to supplement the income of the household. The income per earner is exceedingly low. Therefore, if there are only 2.6 earning members for a family of the size of 6.16, the average family is bound to be poor and the standard of living must necessarily be very low. Such is the situation in Rourkela and compared to Orissa as a whole and even to the district of Sundergarh, Rourkela has a lower standard of living.

*Reasons for not earning*

25. It has been shown earlier that 29 per cent of the persons belonging to the labour force in Rourkela has no employment. This constitutes 17 per cent of the total population. Statement XXXXIV gives a comparative picture in this respect.

*Statement—XXXXIV*

Percentage of non-earners in the labour force  
to total population

Region	Male	Female	Total
Orissa	1.1	13.9	15.0
Sundergarh	0.6	6.3	6.9
Rourkela	1.2	15.8	17.0
	(385 persons)	(5,243 persons)	(5628 persons)

26. The proportion of persons in the working-age group without any gainful employment is considerably larger in Rourkela than in the district of Sundergarh. This has already been shown earlier. The above statement shows the distribution of this unemployment among the males and females. It will be noticed that unemployment is very small among the males in the working age group. In fact, this is only about 1 per cent of the population. The proportion is considerably large among the females. For Orissa as a whole, females belonging to the working-age group but without employment form 13.9 per cent of the total population. In the Rourkela region such unemployed adult females are as many as 15.8 per cent of the total population. Significantly different is the situation for the district of Sundergarh as a whole. In middle class families and in the families of caste Hindus, most women may not go in for any gainful employment. But the case is different among the schedule classes and tribal families. Sundergarh is the district where the tribal population is in majority. Similar is the case in Rourkela. Tribal women work in fields, quarries and else-where just as the menfolk. In the district of Sundergarh, only 6.3 per cent of the total population consists of adult females of the working age without any employment. The position in Rourkela should not have been different, but as it is, the extent of unemployment among the women of the working-age group is considerably large in this region. Most of them are expected to offer themselves for work if congenial employment is available.

27. An attempt was made during the survey to find out why these 5628 persons, both male and female, belonging to the working age were not able to get any employment. The various reasons for not being able to earn have been tabulated and the statement No. XXXXV given below shows the relative importance of the various factors responsible for lack of earning by those who are not gainfully employed.

**STATEMENT XXXXV**  
**REASONS FOR NOT EARNING.**  
*( Cast-Wise )*

Caste.	Old age disabled or ailing.	Student	In search of a Job	Not necessary to earn.	Female and domestic work.	Other Reasons.	Not given	Total
1. Non-schedule-Hindus.	22	71	6	1	1538	—	69	1707
2. Schedule-Cast	4	9	—	—	478	2	23	516
3. Schedule-Tribe.	36	35	—	1	1943	—	87	2102
4. Other-Religions.	4	69	6	—	1169	—	55	1303
<b>TOTAL</b>	66	184	12	2	5128	2	234	5628

28. The statement shows the relative importance of the various reasons why some persons go without work in the Rourkela region. But these figures do not, properly speaking, indicate the extent of unemployment in as much as unemployment cannot be taken as synonymous with not taking up any employment. It is generally accepted that an unemployed person is one who is capable of doing work, is without work, and is in search of work. Those who are voluntarily unemployed or are physically unable to undertake any gainful work cannot be brought under the category of unemployed. It will be seen from the statement that there are some persons who are disabled from taking up any work, some are students, some do not consider it necessary to take up employment and some others are engaged in domestic work. There are only 12 persons who are able to work, willing to work and are in search of employment. Strictly speaking, these 12 persons are involuntarily unemployed. As such, the problem of unemployment in the Rourkela region is non-existent. But this would not be a correct picture. There are as many as 5128 persons who are not gainfully employed because they are taking to domestic work. It cannot be over-emphasised that in an agricultural economy, particularly of the primitive character, consisting of a population majority of which belongs to the



scheduled tribes and castes, women to devote themselves entirely to domestic work and not to take to any gainful employment, is a very unusual feature. A comparison with the state of affairs in the district of Sundergarh makes this clear. As would be evident from the statement, among all the different classes of the community most people who have no jobs come under the category of persons taking to domestic work. Among the tribal families and among those who belong to other religions, majority of whom are also of tribal character, the number of persons confined to domestic work is very large. Most of them could have taken up employment if such employment would have been available in congenial and suitable conditions. It appears that due to lack of suitable employment opportunities, many of the women do not go out for work and content themselves with the domestic work they have to perform at home. There is a good deal of labour power available within this group which might be utilised gainfully provided proper opportunities of work are found in the vicinity.

*Surplus labour force*

29. After analysing the position of employment in the Rourkela region, it would be useful to estimate the extent of labour force available for work outside. A picture of surplus man-power can be presented by considering the proportion of the population that is working outside the region and the number of persons that can be taken out from the working as well as the idle adult population in this region. Statement XXXXVI given below shows the number of persons belonging to different classes in the Rourkela region who have taken up employment else-where.

*Statement—XXXXVI*

Distribution of non-resident earners

Caste	(Caste-wise)		Total
	Male	Female	
Caste Hindus	71	14	85
Scheduled Caste	20	1	21
Scheduled Tribes	112	22	134
Other Religions	73	8	81
Total	276	45	321

30. It will be found from the statement that from all the different classes of the community, some persons, both male and female, have taken up occupations in places outside the Rourkela region. Majority of them are of course males and very few females. From all the different classes, there are earners who are residing else-where. The number is large from among the scheduled tribes and this is particularly so when we know that most of them who belong to other religions are also tribal in character. Considering however the fact that the total working force in Rourkela is more than 19,000, the non-resident earners numbering only 321 is exceedingly small. This shows that surplus population with adventure to earn higher incomes outside has not been a feature of any significance among the people at Rourkela.

31. It would be interesting to note the age-groups to which these non-resident earners belong, to show the type of persons that migrate outside for earning livelihood. Statement XXXXVII furnishes this information showing the number of male and female adults belonging to the different age-groups who have gone out to earn in places outside the Rourkela region.

*Statement—XXXXVII*

Age distribution of the  
Non-resident Earners

Age	Male	Female	Total
13-20	22	13	35
21-25	61	8	69
26-30	40	6	46
31-35	50	2	52
36-40	37	2	39
41-45	25	1	26
46-50	13	3	16
51-55	13	1	14
56-60	7	1	8
61-65	1		1
66 and above	3	..	3
Not given	4	8	12
Total	276	45	321

32. It is naturally expected that most of those who go out to earn else-where would belong to the age-groups 13 to 40. After this age the desire to go out in search of jobs is likely to be very weak. Of the 321 persons who are non-resident earners, as many as 241 belong to the age-group 13 to 40. Among women, the age-group from which persons have gone out to work outside, is 13 to 25. This however is not of any importance in view of the fact that total number of women who have gone out to work else-where is only 45.

33. It is not enough to note how many are seeking employment outside the region. If most of such people are merely casual visitors to work else-where and frequently come back home, then from the point of view of surplus labour force, the number will be considered scarcely important. It is necessarily, therefore, to show how many of them go out and for what periods. Statement XXXXVIII, gives below the number of persons, both male and female, who have stayed outside at a stretch for different periods.

*Statement—XXXXVIII*

Classification of the Non-resident Earners  
on the basis of the period of stay

Period of stay	Male	Female	Total
Less than one year	12	2	14
One year	20	4	24
Two years	22	7	29
Three years	29	5	34
Four years	12	2	14
Five years	39	6	45
Six to ten years	62	6	68
Eleven to fifteen years	39	3	42
Sixteen to twenty years	13		13
Twenty-one and more	8	..	8
Not given	20	10	30
Total	276	45	321.

34. Out of the 321 persons who are non-resident earners, only 14 have been absent for less than a year. All others have

stayed outside for much longer periods. In fact the largest number out of these non-resident earners has been outside for a period of 6 to 10 years. The statement thus clearly indicates that those who have gone out to work else-where are sticking to their employment as regular workers and not as mere casual and seasonal labourers. All these persons are working outside and necessarily earning more than what they could have done at Rourkela, had they remained at home. This figure does not however show the potential labour force available for industrial work in Rourkela. But this indicates that if opportunities are made available nearer home, some, who have not been courageous enough to go outside for work, will come forward to take up employment in the industrial units.

35. During the course of the survey an estimate was attempted of the man-power available to go outside for work. The question was put as to how many would like to go and for what periods. The information collected in the survey is tabulated in the statement given below.

*Statement—XXXXIX*

Age and sex of the earners willing to go  
outside for work—whole year  
and seasonally

Age	For Whole Year		Total	Seasonally		Total
	Male	Female		Male	Female	
13-20	10	—	10	1	—	1
21-25	9	—	9	1	—	1
26-30	9	—	9	1	—	1
31-35	2	—	2	1	—	1
36-40	5	—	5	—	—	—
41-45	5	—	5	—	—	—
46-50	3	—	3	—	—	—
51-55	3	—	3	—	—	—
56-60	1	—	1	—	—	—
61-65	—	—	—	—	—	—
66 and above	3	—	3	—	—	—
Total	50	—	50	4	—	4

36. The information given in the statement above does not show that there is much enthusiasm on the part of the residents in the Rourkela region to go out and take up work else-where. Only 40 persons, belonging to different age-groups, are willing to go out for periods of one year or more for taking up work else-where. Very few were anxious to take up casual or seasonal work outside. The apathy for going out for work was on account of the fact that most families have some landed property and the people being rooted to land lacked mobility. If however work is available in and around the area, many more will be willing to take up employment. In fact during the course of investigation many persons, whose houses and lands were to be acquired, spoke to us that they would like to have small plots of homestead lands near the factory gate and that would satisfy them. This is clear evidence of a desire to take up employment in and around the area when such employment is made available. The type of out-look, the pattern of society and the character of the population are very strong forces militating against the desire to go outside in search of employment. But it will be very different when employment is made available nearer home.

37. The statistical information given above about the extent of unemployment and the number of persons willing to take up work else-where is not a complete picture of the man-power resources available. It is a matter of common knowledge that in an agricultural economy in an under-developed region, there is a great deal of disguised unemployment. There are more persons working on land than what is actually necessary. If by taking away some persons from land, there is no diminution in the aggregate production, then the number of persons who can be so taken out should be considered as surplus labour force. It is difficult to measure quantitatively the extent of such disguised unemployment. In a primitive agricultural economy, such disguised unemployment is not realised by the persons who do not find adequate employment during all the working days. An analysis of surplus man-power available has to take account of these under-employed persons. The statistical information furnished

above does not, therefore, furnish a complete picture of man-power resources. One of the basic purposes of industrialisation is to supplement the agrarian economy so that agriculture may not continue as a mere mode of living, but become a gainful and worthy occupation. Considerable man-power from its inadequate agricultural employments is likely to be absorbed in gainful and profitable employments which will be available on account of industrialisation in this region.

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## APPENDIX A

### Revenue Department Notification

Registered No. 0-14

THE ORISSA GAZETTE

*Extraordinary*

Published by Authority

Cuttack, Monday, February 22, 1954

Revenue Department

Notification

The 22nd February, 1954

No. 863-Dev.-XVII-27/54-R.—Whereas it appears to the Government of Orissa that land is required to be acquired speedily by Government for development of Industries, namely, establishment of a Steel Plant and allied and ancillary industries in the blocks of villages as shows in the schedule below, it is hereby notified that for the above purpose an area measuring more or less 78 square miles is required within the aforesaid villages.

This notification is made, under the provisions of sub-section (1) of section 3 of the Orissa Act XVIII of 1948 to all whom it may concern.

A plan of the land may be inspected in the office of the Collector, Sundergarh.

#### Schedule

1. Block A—Consisting of the undermentioned villages bounded as follows:—

#### Boundary

North	River Koil
South	Eastern Railway
West	Rivers Brahmini and Koil
East	Revenue Road from the Railway level crossing at Rourkela to village Hamirpur and beyond up to river Koil.

List of villages—(1) Panposh, (2) Dahiposh, (3) Tumkella, (4) Purnapani, (5) Luakera, (6) Chhond, (7) Bandhposh, (8) Bamirpur, (9) Lanjiberna.

- II. Block B—Consisting of the following villages—

(1) Bhalupatra, (2) Chikatmati, (3) Sarala, (4) Malikapali, (5) Nuagaon, (6) Mahalipali, (7) Beldih, (8) Kalokudar, (9) Lungai, (10) Goppali, (11) Brahmanitarang, (12) Goibhanga, (13) Gadeibalanda, (14) Tiabahal, (15) Balanda, (16) Jharjaranga, (17) Dandipali, (18) Gutidharh, (19) Garjan, (20) Tumran, (21) Birual, (22) Khairbandh, (23) Buchahanda, (24) Gopdihi (25) Birkira, (26) Arba

Jharabahal, (27) Ranto, (28) Kendberna, (29) Nakakhandia, (30) Jadakubar, (31) Kapataunda, (32) Barabans, (33) Gurgudjore, (34) Kudarbahal, (35) Uparbahal, (36) Birkera, (37) Kukuda, (38) Dumerta, (39) Dumermunda, (40) Sanramlti, (41) Sanpokhari, (42) Dudurta, (43) Sanuparbahal, (44) Bandejure, (45) Manko, (46) Bad-ramoli, (47) Barsuan, (48) Bandomunda, (49) Tarkera, (50) Deogaon, (51) Gopadihi, (52) Bhangamunda, (53) Milmlili, (54) Rourkela, (55) Jharmunda, (56) Bijubandh, (57) Tabgaripali, (58) Jaldia, (59) Kansar, (60) Hatibandha, (61) Attaghat, (62) Asurehpal, (63) Suidihi, (64) Sunaparbat, (65) Nuatol, (66) Dalakudar, (67) Lohadar, (68) Karlakhaman, (69) Lathikata, (70) Kulamunda, (71) Ergeda, (72) Menko, (73) Thepatoli, (74) Turiberna, (75) Kanarsuan, (76) Jharabahal, (77) Raghunathpalli, (78) Durgapur, (79) Mundajori, (80) Balani, (81) Barkani, (82) Urtum, (83) Mahulpali.

By order of the Governor  
Sd. V. RAMANATHAN  
*Additional Secretary to Government.*

Cuttack: printed and published by S. H. Khan,  
Superintendent, Government Press,  
Extraordinary Gazette 177-669

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## APPENDIX B

### VILLAGES SURVEYED

Name of Thana	Sl. No.	Name of villages	Number of families surveyed
1	2	3	4
Raghunathpali	1.	Ahirbandho	40
	2.	Arab Jharbahal	95
	3.	Asur Chadal	23
	4.	Ataghat	48
	5.	Balanda	128
	6.	Belodihi	40
	7.	Bhaloopatra	34
	8.	Bhanga Moonda	32
	9.	Birikera	212
	10.	Biru Aul	36
	11.	Biju Bandha	10
	12.	Bolani	112
	13.	Boro Kani	137
	14.	Brahmoni Tarango	96
	15.	Bundhppsh	42
	16.	Brahmoni Tarango	96
	17.	Buchahonda	80
	18.	Chikaamati	57
	19.	Comesura	43
	20.	Chhendo	106
	21.	Dandiapali	79
	22.	Dahiposh	16
	23.	Dalakudar	47
	24.	De G'an	38
	25.	Durgapur	162
	26.	Eregeda	35
	27.	Gharjan	151
	28.	Gadai Balanda	13
	29.	Gopapali	48
	30.	Goibhanga	34
	31.	Gopodihi	55
	32.	Guru Diho	72
Raghunathpali	33.	Hamirpur	60
	34.	Hatibandha	54
	35.	Jalda	47

36.	Jhoomrun	82
37.	Jharabahal	48
38.	Jiya Pahal	42
39.	Jodakudar	80
40.	Jharmoonda	6
41.	Kalokudar	20
42.	Kenduberan	11
43.	Khariabahal	7
44.	Kola Khamman	13
45.	Kulamundi	39
46.	Kanassuan	35
47.	Lathikota	55
48.	Luhardaro	27
49.	Looakera	46
50.	Lungei	66
51.	Manko	92
52.	Malikpali	17
53.	Mahalipali	2
54.	Milmil	38
55.	Moondoazar	59
56.	Mohoolpali	35
57.	Nakokhandia	11
58.	Nuatoli	28
59.	Nug G&an	41
60.	Cortum	125
61.	Coper Man Bahal	25
62.	Panposh	26
63.	Puranapani	146
64.	Ranto	96
65.	Raghunathpali	93
66.	Rourkela Town	97
Raghunathpali	Sarla	9
68.	Sone Prabat	88
69.	Tangarpali	39
70.	Tarkera	84
71.	Tepateli	8
72.	Tommkora	108
73.	Turiberna	7
74.	Suidihi	44

( v )

Kalunga	75.	Gooti Darha	84
	76.	Jhar Tarang	96
	77.	Khairbandha	60
			<hr/>
			190
			<hr/>
	78.	Bandha Moonda	44
	79.	Bara Banso	45
	80.	Beherabahal	29
	81.	Boro Guan	75
	82.	Bodoram Lako	23
	83.	Budeljor	51
	84.	Birkela	73
	85.	Doodoorota	23
	86.	Doomaramoonda	11
	87.	Doomerta	91
	88.	Gudgudjor	46
	89.	Kadar Bahal	22
	90.	Kopat Moonda	104
	91.	Kookooda	80
	92.	Monoka	27
	93.	Sanouporobahal	14
Bisra	94.	Sani Ramlei	29
	95.	Sonpokhri	18
	96.	Talobahal	15
	97.	Uporo Bahal (Bido)	19
			<hr/>
			844
Raghnathpali			4329
Kulunga			190
Bisra			844
			<hr/>

GRAND TOTAL = 5863.

## APPENDIX C

ORISSA ECONOMIC SURVEY—1955

(Rourkela and the surrounding region) ,

### QUESTIONNAIRE RELATING TO FAMILY

Serial No.....

Date of investigation.....

P. S.	Name of the Head of Family, Investigator.	
Village.	Male or Female	Supervisor.
	Age	Field Controller.
	Religion and Caste	

#### FAMILY OCCUPATION

Principal

Subsidiary

Average annual Family Income.....Last Year's Income.....

- (A) 1. Do you own land? How many acres?  
 2. Did you lease out any portion of your land last year? If so, how many acres?  
 3. Did you lease in any land last year? If so, how many acres?  
 4. Total amount of land cultivated by you last year?  
 5. What crops did you grow there?  
 6. What was your income from them? (in respect of each crop).  
 7. What is the normal yield of your land? (cropwise).  
 8. Indicate the price prevalent for each crop, at the time of last year's harvest.
- (B) 1. Do you practise any trade? (including collection of wood, bamboos etc.).  
 2. How much capital have you invested?  
 3. What is your average annual income?  
 4. Last year's income?
- (C) 1. Do you engage yourself in any form of Transport industries?  
 2. Average annual income?  
 3. Last year's income?
- (D) 1. Do you pursue any type of cottage industries or any other industries?  
 2. Average annual income?

3. Last year's income?
1. Do you work on Farms or in any other way?  
(Describe).
2. Last year's income?
3. In general, for how many days a month you  
get work?
4. What was your principal place of work last  
year?

NUMBERS OF FAMILY AND OTHER PARTICULARS	MALE	FEMALE.
1. Number of persons aged 13 or above?		
2. Number of persons below 13—		

RELATING TO PERSONS AGED 13 OR ABOVE WHO RESIDE IN THE VILLAGE.					
	1	2	3	4	5
Name . . . . .					
Age . . . . .					
Male or Female . . . . .					
Relationship with the Head of the family.					

RELATING TO PERSONS RESIDENT  
IN THE VILLAGE.

1. Earner or Non-earner?
2. If Earner, is he engaged in the principal  
occupation of the family?  
(i) With Head of the Family?  
(ii) If not, what is the nature of his work?
3. Cause, if non-earner?
4. Does the earner usually work in the village?
5. If he does not work, how many months in a  
year?  
(i) Does he work outside village?  
(ii) In which months?
6. To which places does he usually go for work?

RELATING TO PERSONS RESIDING  
OUTSIDE VILLAGE (Above \*13 years)..

1. Name . . . . .
2. Male or Female, Age . . . . .
3. Relationship, with the Head of the Family.
4. For how many years is he away?
5. What service|profession does he pursue?

- |   | MALE | FEMALE |
|---|------|--------|
| 6. When did he go away from village first for his employment? |      |        |
| 7. Does he come back to village every year?                   |      |        |
| 8. If he does, when and for how long?                         |      |        |
| 9. Does he remit money home?                                  |      |        |
| 10. If so, how much per year on an average?                   |      |        |
| 11. How much did he remit last year?                          |      |        |
- 

RELATING TO MEMBERS OF THE FAMILY  
RESIDENT IN THE VILLAGE  
(ABOVE 13 years).

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1. Is it necessary that all the members of the family now resident in the village should continue to do so to carry on the present family occupation?
  2. If not, who are the members who can go to work outside the village for all the year?
  3. Who can go to work outside the village for short periods? In which months?
  4. What type of work do they want?
-

## Errata

Page	Para	Line	Read
3	6	3rd	97
3	6	5th	74
3	6	“villages surveyed”	97
3	7	2nd	97
3	7	7th	97
3	7	10th	97
11	12	1st	97
13	16	11th	97
15	18	4th	97
31	8	8th	97
33	11	6th	97
48	3	11th	97
50	7	6th	38,795
50	7	8th	97
57	18	21st	97
61	24	11th	97
63	Statement XXX		owned land
	Scheduled caste		3,833·0
69	Statement XXXIV		Area of total
			owned land in acres
	Scheduled caste		3,833·0
77	11	2nd	97